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THE
JOURNAL OF PROCEEDINGS AND ADDRESSES
OF THE
NATIONAL EDUCATIONAL ASSOCIATION,
SESSION OF THE YEAR 1886,
AT
TOPEKA, KANSAS.

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THE NATIONAL EDUCATIONAL ASSOCIATION.

FIRST DAY'S PROCEEDINGS.

TUESDAY, JULY 13, 1886.

The twenty-sixth annual meeting of the National Educational Association met in the Grand Opera House, Topeka, Kansas, at 8 o'clock P. M. President N. A. Calkins called the meeting to order and announced that His Excellency, John A. Martin, Governor of Kansas, will preside.

On taking the chair Governor Martin invited the Rev. J. P. Findlay of Missouri to open the meeting with prayer. After prayer, the Modoc Singing Club of Topeka was introduced, and sung two appropriate songs.

Governor Martin made a brief address, after which he introduced Hon. W. H. Rossington of Topeka, who gave an address of welcome to the Association in behalf of the state of Kansas, and of the city of Topeka.

Prof. P. J. Williams, of the State University of Kansas, welcomed the Association in behalf of the teachers of Kansas.

At the close of this address Governor Martin announced that the President of the Association would respond to the addresses of welcome.

At the close of his response the President introduced William E. Sheldon, Secretary of the Association, who made further response to the addresses of welcome.

At the close of Secretary Sheldon's remarks, the President introduced Zalmon Richards of Washington, D. C., who was elected president at the first meeting of the Association. After his address the President introduced Prof. A. G. Boyden of Massachusetts, who spoke in relation to Normal Schools in the United States.

After singing by the Modoc Club, the evening session closed with a benediction by Bishop Vail of Kansas.

SECOND DAY'S PROCEEDINGS.

WEDNESDAY, JULY 14.

The Association was called to order by the President at 9 o'clock A. M. Prayer was offered by Rev. A. B. Hinsdale of Ohio,

The minutes of the meeting for Tuesday evening were read by the Secretary of the Association, and approved.

On motion of Dr. John B. Peaslee of Cincinnati, Hon. LeRoy D. Brown of Ohio, was elected Assistant Secretary.

The report of the Committee to Audit the Treasurer's Accounts was made by the chairman, J. L. Pickard, LL. D., of Iowa. This report was adopted and ordered to be printed in the proceedings of the Association.

The President of the Association, Dr. N. A. Calkins of New York, delivered his inaugural address, which was listened to with great interest.

The Chair introduced Mrs. J. Ellen Foster of Clinton, Iowa, who read a paper entitled "*Physiology and Hygiene with Reference to the Use of Alcoholic Drinks and Narcotics.*" This was followed by a discussion of "*The Effects of Alcohol on the Human System and the Method of Teaching Them,*" by Professor A. G. Boyden of Massachusetts.

The Secretary read the following letter from the Board of Trade at Lawrence, Kansas, inviting the Association to visit that city, which, on motion of Mr. Sheldon, was accepted with thanks.

CHAMBER OF COMMERCE, }
LAWRENCE, KANS., July 9th, 1886. }

At a special meeting held this date the following resolution was offered and unanimously adopted:

Whereas, The National Teachers Association will hold its annual convention at Topeka for four days of next week, commencing Tuesday, and

Whereas, We earnestly desire that an invitation should be extended to the Convention to visit Lawrence, and view her Educational Institutions and the City generally, and

Whereas, Dr. Lippincott has kindly offered to tender such invitation in person,

Resolved, That on behalf of the city and this body we do hereby proffer the hospitalities of the City of Lawrence to the Convention for such date as may be most convenient, and hold ourselves in readiness to do all that is possible to make the visit pleasant and profitable, if our invitation is accepted.

By order of the Board,

J. D. BOWERSOCK,

President.

H. C. WHITEHEAD,
Secretary.

APPOINTMENT OF COMMITTEES.

The President announced a committee of one from each state and territory represented at the meeting of the Association, on the nomination of officers for the ensuing year, of which J. L. Pickard, LL. D., of Iowa, was chairman.

The following committee on resolutions was also appointed:

A. G. BOYDEN, of Massachusetts,

J. BALDWIN, of Texas.

HENRY SABIN, of Iowa,

The Association adjourned to meet in the Opera House at eight o'clock P. M.

Evening Session.

The Association was called to order at 8 o'clock P. M. by President Calkins. The minutes of the morning session were read and approved.

The Secretary read several notices, and the President, after announcing that the address on "*Education in the South*," by the Hon. William M. Beckner of Kentucky, would be postponed on account of the absence of the gentleman, introduced Rev. A. E. Winship, late Secretary of the New West Education Commission, Boston, Massachusetts, who delivered a lecture on "*The Educational Cure of Mormonism*." The Association adjourned to meet at 9 o'clock Thursday morning.

THIRD DAY'S PROCEEDINGS.

THURSDAY MORNING, JULY 15.

The Association was called to order by the President at 9 o'clock A. M. and opened with prayer by the Rev. S. McChesney of Topeka.

The minutes of the last session were read and approved, and the report of the Committee on Amendments to the Constitution, presented by Dr. E. E. White of Cincinnati was received and unanimously adopted.

AMENDMENTS TO THE CONSTITUTION.

Article IV.

1. In Sec. 1, strike out in lines 4 and 5 the words, "officers charged with the administration of their respective departments," and insert the words, *presiding officers of the several departments and a Board of Trustees to be constituted as hereinafter provided.*

2. Add to Sec. 3, the words, *except as hereinafter provided.*

3. Add to Sec. 4, the words, *but no person shall be elected to any office of any department, or of the Association, who is not, at the time of the election, a member of the Association.*

4. For Sec. 7, insert the following:

SEC. 7. The Treasurer shall receive and, under the direction of the Board of Trustees, hold in safe keeping all moneys paid to the Association, shall expend the same only upon the order of said Board, shall keep an exact account of his receipts and expenditures, with vouchers for the latter, which accounts, ending the first day of July, each year, he shall render to the Board of Trustees, and, when approved by said Board, he shall report the same to the Board of Directors. The Treasurer shall give such bond for the faithful discharge of his duties as may be required by the Board of Trustees, and he shall continue in office until the first meeting of the Board of Directors held prior to the annual meeting of the Association next succeeding that for which he is elected.

5. In Sec. 8, line 2, after the word "Association" insert the words, *excepting those herein entrusted to the Board of Trustees.*

6. For Sec. 9 insert the following sections :

SEC. 9. The Board of Trustees shall consist of four members elected by the Board of Directors for a term of four years, and the President of the Association who shall be a member *ex-officio* during his term of office. At the election of Trustees in 1886, one Trustee shall be elected for one year, one for two years, one for three years, and one for four years, and annually thereafter, at the first meeting of the Board of Directors, held prior to the annual meeting of the Association, one Trustee shall be elected for the term of four years. All vacancies occurring in said Board of Trustees, whether by resignation or otherwise, shall be filled by the Board of Directors for the unexpired term and the absence of a Trustee from two consecutive annual meetings of the Board, shall forfeit his membership therein. The Board of Trustees thus elected and constituted shall be the executive financial officers of this Association as a Body Corporate, as conferred by the certificate of incorporation under the provisions of the Act of General Incorporation, Class third of the Revised Statutes of the District of Columbia, dated the twenty-fourth day of February, 1836, at Washington, D. C., and recorded in Liber No. 4, "Acts of Incorporation for the District of Columbia."

SEC. 10. It shall be the duty of the Board of Trustees to provide for the safe keeping and investment of all funds which the Association may receive from life directorships or from donations, and the income of such invested funds shall be used exclusively in paying the cost of publishing the annual volume of proceedings of the Association, excepting when donors shall specify otherwise. It shall also be the duty of the Board to issue orders on the Treasurer for the payment of all bills approved by the Board of Directors or by the President and Secretary of the Association acting under the authority of the Board of Directors; and, when practicable, the Trustees shall invest all surplus funds exceeding \$100, that may remain in the hands of the Treasurer after paying the expenses of the Association for the previous year.

Article V.

7. In Sec. 6, line 3, at the beginning, insert the words, *the President and.*

By-Laws.

For By-Law 2, substitute the following :

2. The President and Secretary shall certify to the Board of Trustees all bills approved by the Board of Directors.

Dr. White read a paper, on "*Moral Training in the Public Schools.*"

Discussion of the paper which on motion was limited to five-minute speeches, was participated in by Dr. I. W. Andrews of Ohio; Dr. J. W. Stearns of Wisconsin; Dr. John B. Peaslee of Ohio; Professor Wiener of Missouri; Professor Wm. Baker of Kansas; Professor H. T. Kealing of Texas; and Professor A. G. Boyden of Massachusetts.

Superintendent Louis R. Klemm of Ohio opened a discussion on "*Some of the Serious Errors of Teaching,*" by treating of "*Study and Recitations; per cent, System of Marking Pupils; Competitive Examinations,*"

This discussion was concluded by Superintendent J. M. Greenwood of Missouri.

The Chair called for the report of the Committee on Nominations, which recommended the election of the following list of officers for the ensuing year :

THE OFFICERS FOR 1887-88.

Dr. Pickard of Iowa, chairman of the nominating committee, presented the report, and in accordance with the unanimous recommendation of the committee the following were nominated as the officers of the National Educational Association for the ensuing year :

President, WILLIAM E. SHELDON, Massachusetts,

Secretary, JAMES H. CANFIELD, of Kansas,

Treasurer, E. C. HEWETT, of Illinois.

Vice-Presidents, Mrs. Delia L. Williams of Ohio, Henry Sabin of Iowa, A. G. Boyden of Massachusetts, Miss F. E. Holbrook of Illinois, Aaron Gove of Colorado, Hattie O. Thoms of Wisconsin, Warren Easton of Louisiana, W. R. Garret of Tennessee, Julius D. Dreher of Virginia, Mrs. M. A. Stone of Connecticut, Miss Ella Calkins of New York.

Counselors at Large, E. E. White of Ohio, N. A. Calkins of New York.

Counselors, L. H. Marvel of Maine, C. C. Rounds of New Hampshire, A. L. Hardy of Vermont, L. Dunton of Massachusetts, Geo. A. Littlefield of Rhode Island, S. T. Dutton of Connecticut, George A. Bacon of New York, H. S. Jones of Pennsylvania, Joseph Clark of New Jersey, Isaac T. Johnson of Delaware, Henry A. Wise of Maryland, J. L. Buchanan of Virginia, S. D. Brown of West Virginia, J. H. Carlisle of South Carolina, Gustavus J. Orr of Georgia, W. H. Council of Alabama, S. R. Preston of Mississippi, E. E. Sheib of Louisiana, Alexander Hogg of Texas, Leroy D. Brown of Ohio, W. A. Bell of Indiana, D. S. Howell of Michigan, Thomas H. McBride of Iowa, Wm. H. Bartholomew of Kentucky, T. C. Karns of Tennessee, D. C. Tillotson of Kansas, Henry M. James of Nebraska, S. S. Laws of Missouri, G. D. Purinton of Arkansas, N. C. Dougherty of Illinois, Charles S. Young of Nevada, E. H. Anderson of Utah, J. O'Connor of California, T. O. Hutchinson of Oregon, Z. Richards of the District of Columbia, W. D. Parker of Wisconsin, D. L. Kiehle of Minnesota, J. E. Manox of Dakota, J. M. Allen of Kentucky, and L. S. Cornell of Colorado.

On motion of Supt. B. A. Hinsdale of Ohio, Dr. E. E. White was authorized to cast the ballot for the Association, and the Chair announced that those reported by the committee were elected.

Adjourned to meet at 8 o'clock P. M.

Evening Session.

The minutes of the morning session were read and approved. Secretary Sheldon read the following communication :

To the National Educational Association :

At the last meeting of the Association it was ordered that a committee of five be appointed to consider the subject of Physics-teaching. By some accident

however, no appointments were made until it was so late in the spring as to leave no time to confer with experienced teachers, or to co-operate with the committee appointed on the same subject by the American Association for the Advancement of Science.

Accordingly while we are in substantial agreement on all the fundamental points that we have considered together, we have not been able to give the necessary attention to many points of detail.

We must therefore say reluctantly that we are unable to make a satisfactory report at this time. But we urge the Association to order the appointment of a new committee, with the same powers as the present one, on which representatives of the High Schools shall not be wanting. If such committee shall be ordered we beg leave to invite and urge upon all earnest teachers of physics in our schools to report, without undue modesty, to the committee, through the President of the Association, such of their methods as have stood the test of experience.

Respectfully submitted,

Charles K. Wead, }
 Leroy C. Cooley, } Committee.
 W. Le Conte Stevens, }

July 10, 1886.

On motion the same committee was continued, with the addition of two representatives of high schools to be appointed by the Chair.

On motion of Rev. A. E. Winship of Boston the following was referred to the Committee on Resolutions:

Resolved, That the members of the National Educational Association most heartily approve of and sympathize with the spirit of the Congressional enactment of January, 1883, commonly known as the Civil Service Law.

President William Preston Johnson of Tulane University, New Orleans, La., was introduced and delivered an able address on "*Education in Louisiana*."

After some announcements were made by the Secretary, Professor Zalmon Richards of Washington, D. C., the Chairman *pro tempore*, declared the Association adjourned till 9 A. M. Friday.

FOURTH DAY'S PROCEEDINGS.

FRIDAY, JULY 16.

The Association was called to order by President Calkins, at 9 A. M.

On motion Supt. Miron E. Hard, of Gallipolis, Ohio, was elected Assistant Secretary.

The minutes of the evening session were read and approved.

On motion of LeRoy D. Brown, J. E. Manox of Dakota, J. M. Allen of Kentucky, L. S. Cornell of Colorado, were appointed Councillors for the above states, and Professor Walter S. Goodnough of Ohio was authorized to represent the Art Department in the Board of Directors at the present meeting of the Association.

The following report by D. B. Hagar, Ph. D., President of the National Council of Education, was ordered to be printed in the proceedings :

To the National Educational Association :

In compliance with the Constitution of the National Council of Education, I present to the Association the following report of the work of the Council at its recent meeting.

The meeting opened on Friday, July 10, at 9.30 A. M. Two sessions were held on Friday, two on Saturday, two on Monday, and one on Tuesday.

Six of the Standing Committees presented reports :

1. Committee on Elementary Education, by Albert G. Boyden, Bridgewater, Mass.; Subject, *Textbooks in Elementary Education*.
2. Committee on City School Systems, by H. S. Jones, Erie, Pa.; Subject, *Pupils—Classification, Examination, and Promotion*.
3. Committee on Higher Education, by A. L. Chapin, Beloit, Wis.; Subject, *Higher Institutions Required*.
4. Committee on the Education of Girls, by H. M. James, Omaha, Neb.; Subject, *Technical Education of Girls*.
5. Committee on Technological Education, by S. H. Peabody, Champaign, Ill.; Subject, *The Pedagogical Value of the School Workshop*.
6. Committee on Pedagogics, by W. H. Payne, Ann Arbor, Mich.; Subject, *The Functions of the Public School*.

These several reports had been prepared with commendable care, and they presented subjects of great importance.

The discussions based upon the reports were participated in by nearly all the members of the Council that were present, and were earnest, comprehensive, and remarkably interesting. The report of the Committee on Technological Education and the discussion thereon occupied two sessions of the Council. Full notes of the discussions were taken and will be published in connection with the reports.

The Council appears to be faithfully performing the work for whose accomplishment it was organized.

Respectfully submitted,

DANIEL B. HAGAR,
President of the Council.

President Calkins announced that the subject of the papers to be presented this morning was—"The Problem of Race Education in the United States." He then introduced MR. ROBERT L. OWEN, formerly Secretary of the Cherokee Board of Education, Indian Territory, who read a paper on

THE RESULTS OF EDUCATION IN THE INDIAN TERRITORY.

The next paper read was by the Rev. S. L. Baldwin, late Missionary in China, on

THE EDUCATION OF THE MONGOLIAN OR CHINESE.

The third topic—"THE EDUCATION OF THE MEXICAN," was treated in a paper by W. H. ASHLEY, of New Mexico.

The fourth topic—"EDUCATIONAL WORK AMONG THE COLORED RACE AT THE SOUTH," was presented by W. H. BARTHOLOMEW of Kentucky.

J. Baldwin of Huntsville, Texas, spoke briefly upon the same subject. The time being limited the question was not discussed farther.

BUSINESS MEETING.

W. E. Sheldon of Massachusetts, chairman of the Committee on Necrology for 1886, gave a list of the prominent members of the Association that had died during the year, among whom were John D. Philbrick, LL. D., J. Dorman Steele, Ph. D., Ariel Parish, and others. The committee was instructed to prepare, for the volume of Proceedings, suitable memorial notices of the deceased members.

The following telegram was received and read by President Calkins:

CHAUTAUQUA, N. Y., July 19, 1886.

Hon. N. A. Calkins, President National Teachers' Association:

Chautauqua University, through its teachers' retreat, schools of language, and teachers' reading union, greets and congratulates the National Association.

J. H. VINCENT, Chancellor.

ADJOURNED.

Evening Session.

The Association was called to order at 8.15 P. M. by President Calkins. The minutes of the morning session were read and approved.

On motion of Secretary Sheldon the committee on "*Tenure of Office of Teachers*," appointed in 1885, was continued with the addition of two members, to be named by the Chair.

THE RESOLUTIONS.

A. G. Boyden of Massachusetts, chairman, presented the following report of the Committee on Resolutions, which was unanimously adopted:

Resolved, That the cordial thanks of the Association are hereby tendered to all individuals, societies, and corporations, in Topeka and elsewhere, who by their valuable services, in various ways contributed, have aided in bringing this 25th annual meeting to a successful issue.

First, to all railroad corporations for all favors received, especially to W. F. White, General Passenger Agent of the Santa Fe Railway, for his efficient services in securing railway facilities;

Second, to Governor Martin and the Executive Council, for their hearty co-operation and for the use of the State House and grounds;

Third, to President Edward Wilder of the City Library Association, and to officers of churches, for the use of their rooms, and for all other favors extended;

Fourth, to George S. Chase, president of the Board of Education of Topeka, and his associates, for the use of the city building, and the Harrison School Building;

Fifth, to the Press Club, for the use of their rooms;

Sixth, to ex-State Supt. H. C. Speer, City Supt. D. C. Tillotson, Prin. H. G. Larimer, Prof. James H. Canfield, A. R. Taylor, Prest. Geo. T. Fairchild, and their associates, for their untiring efforts to promote the comfort of those in attendance;

Seventh, to the newspapers of Topeka, for their full and careful reports of the meetings;

Eighth, to the citizens of Topeka generally, for their generous hospitality and great kindness shown to their guests;

Ninth, to the writers of papers and reports, and speakers, for the valuable thoughts and discussions which they have contributed; and to those who have made exhibits of educational work;

Tenth, to President Calkins and his associates on the executive board, for the signal ability, fidelity, and impartiality with which they have discharged their duties in the conduct of this meeting; and

Lastly, to all who have in any way contributed to make this one of the largest and most fruitful meetings in the history of the Association.

Rev. A. E. Winship, of Boston, offered the following resolutions, which were adopted :

Whereas, The illiteracy of certain sections of the country continues to jeopardize those interests so vital to our national life; and

Whereas, The friends of education in Congress honestly differ in their estimate of the wisdom of making the appropriation provided for by the various bills now before that body; and

Whereas, A consensus of opinion of leading educators of all sections of the country is eminently desirable; therefore

Resolved, That the National Educational Association recommends to the governors of the several states and territories the calling of an Interstate Educational Convention to consider the various interests involved in the question of federal aid to education.

Resolved, That a committee of five be appointed to confer with the state authorities and co-operate with them in the holding of such a convention, and that this committee have power to increase the number if deemed desirable.

The Chair announced that Wm. E. Sheldon of Massachusetts and Aaron Gove of Colorado were appointed to serve on the committee on "*The Tenure of Office of Teachers*," and that Rev. A. E. Winship of Massachusetts, J. D. Dreher of Virginia, William Preston Johnston of Louisiana, S. T. Dutton of Connecticut, and John B. Peaslee of Cincinnati would constitute the committee on the Interstate Educational Convention.

The President introduced the following gentlemen, who all delivered characteristic speeches appropriate to the concluding session of the Association : Professor I. C. Dennett of Colorado, Professor H. G. Kealing of

Texas, Dr. John Hancock of Ohio, Supt. G. T. Littlefield of Rhode Island, Dr. Daniel B. Hagar of Massachusetts, Principal Robert Allyn of Illinois, Professor R. C. Norton of Missouri, President Julius H. Dreher of Virginia, Supt. John MacDonald of Kansas, Dr. Duncan Brown of Kansas.

President Calkins, after some well-timed remarks, introduced the President elect, William E. Sheldon of Massachusetts, who delivered a brief and appropriate address.

The singing of the long meter doxology, led by Dr. Hagar of Massachusetts, and the benediction, pronounced by Bishop Thomas H. Vail of Topeka, concluded the very profitable twenty-fifth annual meeting of the National Educational Association.

NATIONAL EDUCATIONAL ASSOCIATION, 1886.

MINUTES OF THE BOARD OF DIRECTORS.

FIRST MEETING.

TOPEKA, KAN., July 13, 1886.

The Board of Directors met at the Senate Chamber at 4 o'clock P. M., in accordance with the call of the Executive Committee as provided by the Constitution. President N. A. Calkins in the chair. Members present: Messrs. Calkins, Sheldon, Hewett, Stevenson, Boyden, Hagar, Gove, Sabin, Pickard, Brown, White, Goodnough, Richards, and Fairchild.

The records of the last meeting were read by the Secretary and approved. The report of the Treasurer, N. A. Calkins, for 1885-86, was read by the Secretary. It showed the receipts, from all sources, to have been \$1982.42, and the expenditures \$1981.29, leaving a balance in the treasury of \$1.13.

On motion of Mr. Sheldon an Auditing Committee was chosen, consisting of Messrs. J. L. Pickard and Aaron Gove. A report was made by Mr. Pickard, in behalf of the Trustees of the Permanent Fund. It showed that the permanent Fund invested now amounts to \$3300.00, loaned on first mortgage on real estate. The report was accepted and laid upon the table for consideration when the Board takes up the question of organization under a Charter. Mr. Calkins reported the action taken by a Committee chosen at Saratoga, last year, to secure a Charter. He reported that an act of incorporation had been secured at Washington, D. C., on February 24, 1886, subject to approval by the Association.

The minutes of a meeting of the three incorporators—Messrs. Calkins, Eaton, and Richards, held in Washington, Feb. 24, 1886—were read by the Secretary, Zalmon Richards. Mr. Hewett moved to accept the report of the Committee made by Mr. Calkins, which was passed. E. E. White reported the changes in the Constitution that would be necessary to conform to the requirements of the Charter, and also, certain other alterations in the Constitution that seemed to be desirable. Mr. Pickard moved that E. E. White be Committee of one to present the changes in the Constitution to meet the requirements of the Charter and other amendments, as approved by the Board of Directors. This motion was carried. Mr. White moved that the President, Mr. Calkins, be requested to present to the Association the question of accepting a Charter, and the

reasons for the change. Mr. Hagar moved and Mr. Gove seconded the motion that a committee of three be appointed by the Chair to report five names as members of the National Council of Education. Passed. The Chair named D. B. Hagar, Aaron Gove, and R. W. Stevenson, as this committee.

The President stated some matters of interest to the Board of Directors in regard to the meeting of the Association in Topeka. On motion of Mr. Richards the Board adjourned to meet July 14, at 7.30 o'clock P. M., on the stage of the Grand Opera House.

W. E. SHELDON,
Secretary.

BOARD OF DIRECTORS—SECOND MEETING.

TOPEKA, KAN., July 14, 1886.

The Board of Directors met at the Opera House, at 7.30 P. M.

Members present, Calkins, Hagar, Sabine, Sheldon, Gove, Fairchild, Pickard, Richards, and Dreher.

Mr. Hagar, chairman of Committee on New Members of the Council, made a report, and the Board of Directors proceeded to an election, with the following results :

John Hancock, Ohio; F. Louis Soldan, Mo.; N. A. Calkins, N. Y.; J. Baldwin, Texas; James H. Canfield, Kansas.

Mr. Hagar moved to adjourn, subject to the call of the President. Passed.

W. E. SHELDON.
Secretary.

NEW BOARD OF DIRECTORS.

TOPEKA, KANSAS, July 17, 1886.

The new Board of Directors of the National Educational Association met in the Senate Chamber, East Wing of the State Capitol, at 8.15 A. M. The President elect, William E. Sheldon, in the chair. The roll was called by the Secretary, and the following persons responded :

Messrs. Allen, Allyn, Anderson, Bacon, Bartholomew, Baldwin, Bell, Brown [L. D.], Brown [S. D.], Boyden, Calkins, Canfield, Clark, Council, Dougherty, Dreher, Easton, Fairchild, Garrett, Gove, Greenwood, Hagar, Hardy, Hewett, Hogg, Hutchinson, James, Jewett, Johnson, Karns, Littlefield, McBride, Mowry, O'Conner, Perry, Purinton, Richards,

Sabin, Sheldon, Taylor, Tillotson, White, Wise, and Young; and Mrs. Williams and Miss Holbrook. The President announced a quorum present.

W. A. Bell moved that a committee of three be appointed to nominate and report a Board of Trustees.

Carried.

The President appointed Messrs. Bell, White, and Boyden as such committee.

A petition, signed by Geo. A. Bacon and twenty-five others, asking for the formation of a Department of Secondary Education, was presented.

It was moved that the petition be granted.

Carried.

The Committee appointed to Nominate Trustees reported as follows

John Eaton, Washington, D. C., for one year; Zalmon Richards, Washington, D. C., for two years; Horace S. Tarbell, Providence, R. I., for three years; N. A. Calkins, 124 East 80th, New York, for four years.

On motion the report was *accepted* and adopted.

On motion the Board then received invitations for the next meeting of the Association.

It was moved that each locality be given five minutes in which to present its claims.

Carried.

The following gentlemen then spoke in behalf of the localities indicated:

J. Baldwin, Austin, Texas; Albert G. Lane, Chicago, Ill.; W. A. Bell, Grand Rapids, Mich.; W. R. Garrett, Nashville, Tenn.; Geo. T. Littlefield, Newport, R. I.; J. O'Conner, San Francisco, Cal.

At this point a report was received from the General Meeting of the Association, stating that L. S. Cornell of Colorado, and J. M. Allen of Kentucky, had been made Councillors; that J. E. Manox of Dakota had been made a Councillor in the place of W. H. Bartholomew, who had been elected President of the Department of Elementary Instruction; and asking that W. S. Goodenough be allowed to represent the Art Department at this meeting of the Board.

The gentlemen named took their seats in the Board.

Speaking then continued as follows:

Chas. S. Young, San Francisco; Pres. Sheldon, Chautauqua and Saratoga; Alex. Hogg, Nashville; Jerome Allen, Niagara; F. R. Feitshans, and Allen Ovendorff, Springfield, Ill.

E. E. White moved that the members of the Board of Directors shall now indicate by ballot their preference respecting the place of the next annual meeting of the Association, but that the final determining of the place of meeting be left to the President, Secretary, and Treasurer.

It was moved that this motion be divided as shown by the two clauses, and that the sense of the Board be expressed by ballot.

Carried.

Messrs. Gove and Hardy were appointed Tellers.

The first ballot was then taken as follows :

San Francisco, 10; Springfield, 8; Nashville, 8; Chicago, 7; Newport, 2; Total, 34.

It was moved to take a second ballot, dropping the lowest.

Carried.

The second ballot was then taken as follows :

San Francisco, 12; Springfield, 10; Nashville, 8; Chicago, 8; Total, 38.

It was moved to take a third ballot by tally.

Lost.

It was moved to take a third ballot by a call of the roll.

Carried.

The third ballot was then taken, the Secretary calling the roll and the Tellers tallying, as follows :

San Francisco, 12; Springfield, 10; Chicago, 8; Nashville, 7; Total, 37.

It was moved to proceed to a fourth ballot, dropping the lowest.

Carried.

The fourth ballot was then taken, on a call of the roll, as before, as follows :

San Francisco, 15; Springfield, 13; Chicago, 7; Total, 35.

It was moved to proceed to a fifth ballot, dropping the lowest.

Carried—on a division of the house, by a vote of 15 to 11.

It was moved by Mr. Gove to submit the fifth ballot and the entire question to a committee consisting of the President, Secretary, and Treasurer.

It was moved that the motion to proceed to a fifth ballot be reconsidered.

It was moved that the motion by Mr. Gove be laid upon the table.

Lost—on a division of the house, by a vote of 12 to 19.

Mr. Taylor then moved the previous question, and Mr. Gove's motion was *carried*—on a division of the house, by a vote of 21 to 9.

Mr. Littlefield then introduced the following resolution :

Resolved, that in the judgment of this Board, Newport, R. I., is a desirable place in which to hold a Summer Convention of the National Educational Association; and *Resolved*, that this Board recommend to the Board to be chosen in 1887 the consideration of that place first of all as the place of meeting for 1888.

Tabled.

Mr. Hewett then asked to be excused from the committee to determine the location of the next meeting.

Mr. Brown moved to excuse, on their own request, all members of the committee who represented states in which the meeting might be located.

After a strong expression of confidence in Mr. Hewett, this motion was *laid on the table*—on a division of the house, by a vote of 16 to 12.

It was moved to add Mr. O'Conner to the Committee, to act upon location only.

Tabled—on a division of the house, by a vote of 16 to 10.

It was then moved that the Board do now adjourn, subject to the call of the Executive Committee.

Carried.

JAMES H. CANFIELD.

Secretary.

SUMMARY OF TREASURER'S REPORT, 1885.

NATIONAL EDUCATIONAL ASSOCIATION IN ACCOUNT WITH N. A. CALKINS,
TREASURER.

From July 1, 1885, to July 1, 1886.

Balance from account, July 1, 1885,		\$5 28
Receipts from one Life Director,	\$100 00	
" " two Life Members,	40 00	
" " 657 Annual Members,	1,314 00	
" " Sale of Volumes,	331 14	
" " Interest on Permanent Fund,	192 00	
		<u>\$1,977 14</u>
		<u>\$1,982 42</u>

Payments on account of expenses for 1885.

Sundry expenses for Pres. Soldan,	\$132 30	
" " " Sec'y Sheldon,	42 48	
" " " Treasurer,	23 50	
		<u>\$198 28</u>
Expenses for Postage, (including mailing of Proceedings),	\$348 91	
" " Telegrams,	15 37	
" " Express,	13 22	
		<u>377 50</u>
Expenses for Printing (including Proceedings of 1885),	\$1,136 80	
" " Plates for Vol. of 1885,	62 58	
		<u>1,199 38</u>
Paid for Volumes of 1883 to complete sets,		3 00
Expenses on account of Association,	\$78 63	
" " " " Departments,	24 50	
		<u>103 13</u>
Paid Trustee of Permanent Fund,		100 00
Balance in Treasury, July 1, 1886,		1 13
		<u>\$1,982 42</u>

The Treasurer's Report has been carefully examined, the expenditures compared with vouchers, and all found correct. Books and reports and vouchers are worthy the highest commendation.

AARON GOVE.

J. L. PICKARD.

TOPEKA, KANSAS, July 13, 1886.

CALENDAR OF MEETINGS.

NATIONAL TEACHERS' ASSOCIATION.

- | | |
|---|--|
| <p>1857.—PHILADELPHIA, PA.
Organized.
JAMES L. ENOS, Chairman.
W. E. SHELDON, Sec.</p> <p>1858.—CINCINNATI, OHIO.
Z. RICHARDS, Pres.
J. W. BULKLEY, Sec.
A. J. RICKOFF, Treas.</p> <p>1859.—WASHINGTON, D. C.
A. J. RICKOFF, Pres.
J. W. BULKLEY, Sec.
C. S. PENNELL, Treas.</p> <p>1860.—BUFFALO, N. Y.
J. W. BULKLEY, Pres.
Z. RICHARDS, Sec.
O. C. WIGHT, Treas.</p> <p>1861, 1862.—No Session.</p> <p>1863.—CHICAGO, ILL.
JOHN D. PHILBRICK, Pres.
JAMES CRUIKSHANK, Sec.
O. G. WIGHT, Treas.</p> <p>1864.—OGDENSBURG, N. Y.
W. H. WELLS, Pres.
DAVID N. CAMP, Sec.
Z. RICHARDS, Treas.</p> | <p>1865.—HARRISBURG, PA.
S. S. GREENE, Pres.
WILLIAM E. SHELDON, Sec.
Z. RICHARDS, Treas.</p> <p>1866.—INDIANAPOLIS, IND.
J. P. WICKERSHAM, Pres.
S. H. WHITE, Sec.
S. P. BATES, Treas.</p> <p>1867.—No Session.</p> <p>1868.—NASHVILLE, TENN.
J. M. GREGORY, Pres.
L. VAN BOKKELEN, Sec.
JAMES CRUIKSHANK, Treas.</p> <p>1869.—TRENTON, N. J.
L. VAN BOKKELEN, Pres.
W. E. CROSBY, Sec.
A. L. BARBER, Treas.</p> <p>1870.—CLEVELAND, OHIO.
DANIEL B. HAGAR, Pres.
A. P. MARBLE, Sec.
W. E. CROSBY, Treas.</p> |
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NAME CHANGED TO NATIONAL EDUCATIONAL ASSOCIATION.

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| <p>1871.—ST. LOUIS, MO.
J. L. PICKARD, Pres.
W. E. CROSBY, Sec.
JOHN HANCOCK, Treas.</p> <p>1872.—BOSTON, MASS.
E. E. WHITE, Pres.
M. H. WHITE, Sec.
JOHN HANCOCK, Treas.</p> <p>1873.—ELMIRA, N. Y.
B. G. NORTHROP, Pres.
S. H. WHITE, Sec.
JOHN HANCOCK, Treas.</p> <p>1874.—DETROIT, MICH.
S. H. WHITE, Pres.
A. P. MARBLE, Sec.
JOHN HANCOCK, Treas.</p> <p>1875.—MINNEAPOLIS, MINN.
W. T. HARRIS, Pres.
W. R. ABBOT, Sec.
A. P. MARBLE, Treas.</p> <p>1876.—BALTIMORE, MD.
W. F. PHELPS, Pres.
W. D. HENKLE, Sec.
A. P. MARBLE, Treas.</p> <p>1877.—LOUISVILLE, KY.
M. A. NEWELL, Pres.
W. D. HENKLE, Sec.
J. ORMOND WILSON, Treas.</p> <p>1878.—No Session.</p> <p>1879.—PHILADELPHIA, PA.
JOHN HANCOCK, Pres.
W. D. HENKLE, Sec.
J. ORMOND WILSON, Treas.</p> | <p>1880.—CHAUTAQUA, N. Y.
J. ORMOND WILSON, Pres.
W. D. HENKLE, Sec.
E. T. TAPPAN, Treas.</p> <p>1881.—ATLANTA, GA.
JAMES H. SMART, Pres.
W. D. HENKLE, Sec.
ELI T. TAPPAN, Treas.</p> <p>1882.—SARATOGA SPRINGS, N. Y.
G. J. ORR, Pres.
W. E. SHELDON, Sec.
H. S. TARBELL, Treas.</p> <p>1883.—SARATOGA SPRINGS, N. Y.
ELI T. TAPPAN, Pres.
W. E. SHELDON, Sec.
N. A. CALKINS, Treas.</p> <p>1884.—MADISON, WIS.
THOMAS W. BICKNELL, Pres.
H. S. TARBELL, Sec.
N. A. CALKINS, Treas.</p> <p>1885.—SARATOGA SPRINGS, N. Y.
F. LOUIS SOLDAN, Pres.
W. E. SHELDON, Sec.
N. A. CALKINS, Treas.</p> <p>1886.—TOPEKA, KAN.
N. A. CALKINS, Pres.
W. E. SHELDON, Sec.
E. C. HEWETT, Treas.</p> |
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NATIONAL EDUCATIONAL ASSOCIATION OF THE UNITED STATES.

OFFICERS FOR 1885-6.

GENERAL ASSOCIATION.

N. A. CALKINS.....	NEW YORK.....	<i>President.</i>
WILLIAM E. SHELDON.....	BOSTON, MASS.....	<i>Secretary.</i>
EDWIN C. HEWETT.....	NORMAL, ILL.....	<i>Treasurer.</i>

Vice-Presidents.

F. Louis Soldan, Missouri.	Julius D. Dreher, Virginia.	J. W. Stearns, Wisconsin.
S. T. Dutton, Connecticut.	S. M. Finger, North Carolina.	Joseph L. Pickard, Iowa.
Jas. MacAllister, Pennsylvania.	Edward E. Shelby, Louisiana.	Ella C. Sabin, Oregon.
• Le Roy D. Brown, Ohio.	J. Baldwin, Texas.	Z. Richards, Dist. of Columbia.

Councillors-at-Large.

Hon. John Eaton, Washington, D. C.	Emerson E. White, Cincinnati, Ohio:
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Councillors.

W. J. Corthell, Maine.	Julia Tutweller, Alabama.	E. H. Long, Missouri.
C. C. Rounds, New Hampshire.	J. R. Preston, Mississippi.	W. W. Jones, Nebraska.
Justus Dart, Vermont.	E. Nicholson, Louisiana.	John Swett, California.
Larkin Duntun, Massachusetts.	O. V. Hayes, Arkansas.	Aaron Gove, Colorado.
Sarah E. Doyle, Rhode Island.	Clara Conway, Tennessee.	G. C. Hall, Arizona.
Charles D. Hine, Connecticut.	W. D. Parker, Wisconsin.	F. H. Crawford, Oregon.
C. D. McLean, New York.	R. D. Allen, Kentucky.	J. M. Fendley, Texas.
W. N. Barringer, New Jersey.	R. W. Stevenson, Ohio.	J. M. Coyner, Utah.
H. S. Jones, Pennsylvania.	O. S. Westcott, Illinois.	W. H. Beadle, Dakota.
G. Stanley Hall, Maryland.	S. S. Parr, Indiana.	A. S. Nichols, Montana.
S. C. Armstrong, Virginia.	W. H. Payne, Michigan.	John Hitt, Dist. of Columbia.
S. B. Brown, West Virginia.	Henry Sabin, Iowa.	J. H. Covell, Indian Territory.
Chas. E. Taylor, North Carolina.	Irwin Shepard, Minnesota.	Chas. Young, Nevada.
Y. C. Dibble, South Carolina.	J. S. Cowdon, Florida.	J. S. Ingraham, Washington Ter.
J. M. F. Irving, Georgia.	H. C. Speer, Kansas.	

DEPARTMENTS.

School Superintendence.

WARREN EASTON.....	<i>President.</i>	Baton Rouge, La.
A. P. STONE.....	<i>Vice-President.</i>	Springfield, Mass.
C. C. DAVIDSON.....	<i>Secretary.</i>	Alliance, O.

Higher Instruction.

JEROME ALLEN.....	<i>President.</i>	New York.
ELIAB W. COY.....	<i>Vice-President.</i>	Cincinnati, O.
E. J. JAMES.....	<i>Secretary.</i>	Philadelphia, Pa.

Normal Schools.

ALBERT G. BOYDEN.....	<i>President.</i>	Bridgewater, Mass.
GEO. L. OSBORNE.....	<i>Vice-President.</i>	Warrensburg, Mo.
E. H. COOK.....	<i>Secretary.</i>	Potsdam, N. Y.

Industrial Education.

JAMES MACALISTER.....	<i>President.</i>	Philadelphia, Pa.
JOHN M. ORDWAY.....	<i>Vice-President.</i>	New Orleans, La.
W. F. M. GOSS.....	<i>Secretary.</i>	Lafayette, Ind.

Art Education.

WALTER S. GOODNOUGH.....	<i>President.</i>	Columbus, O.
CHARLES M. CARTER.....	<i>Vice-President.</i>	Boston, Mass.
VIENNA DODGE.....	<i>Secretary.</i>	Winona, Minn.

Music Education.

G. STANLEY HALL.....	<i>President.</i>	Baltimore, Md.
O. S. WESTCOTT.....	<i>Vice-President.</i>	Chicago, Ill.
T. H. BRAND.....	<i>Secretary.</i>	Madison, Wis.

Kindergarten Instruction.

W. N. HAILMANN.....	<i>President.</i>	La Porte, Ind.
J. W. DICKINSON.....	<i>Vice-President.</i>	Boston, Mass.
MISS S. A. VAN NOTE.....	<i>Secretary.</i>	La Porte, Ind.

Elementary Schools.

JOHN W. HOLCOMBE.....	<i>President.</i>	Indianapolis, Ind.
L. R. KLEMM.....	<i>Vice-President.</i>	Hamilton, O.
MARGARET W. SUTHERLAND.....	<i>Secretary.</i>	Mansfield, O.
MRS. EVA D. KELLOGG.....	<i>Asst. Secretary.</i>	Charlotte, N. C.

National Council of Education.

DANIEL B. HAGAR.....	<i>President.</i>	Salem, Mass.
H. S. JONES.....	<i>Vice-President.</i>	Erie, Pa.
GEORGE P. BROWN.....	<i>Secretary and Treasurer.</i>	Terre Haute, Ind.

NATIONAL EDUCATIONAL ASSOCIATION OF THE UNITED STATES.

OFFICERS FOR 1886-7.

GENERAL ASSOCIATION.

WILLIAM E. SHELDON.....	Boston, Massachusetts.....	<i>President.</i>
JAMES H. CANFIELD.....	Lawrence, Kansas.....	<i>Secretary.</i>
E. C. HEWETT.....	Normal, Illinois.....	<i>Treasurer.</i>

Vice Presidents.

Mrs. Della L. Williams, Ohio.	Aaron Gove, Colorado.	Julius D. Dreher, Virginia.
Henry Salin, Iowa.	Hattie O. Thoms, Wisconsin.	Mrs. M. A. Stone, Connecticut.
A. G. Joyden, Massachusetts.	Warren Easton, Louisiana.	Miss Ella Calkins, New York.
Miss F. E. Holbrook, Illinois.	W. R. Garrett, Tennessee.	

Councillors-at-Large.

E. E. White, Ohio.

N. A. Calkins, New York.

Councillors.

L. H. Marvel, Maine.	Gustavus J. Orr, Georgia.	G. D. Purinton, Arkansas.
C. C. Rounds, New Hampshire.	W. H. Council, Alabama.	N. C. Dougherty, Illinois.
A. L. Hardy, Vermont.	S. R. Preston, Mississippi.	Charles S. Young, Nevada.
L. Dutton, Massachusetts.	E. E. Sheib, Louisiana.	E. H. Anderson, Utah.
G. A. Littlefield, Rhode Island.	Alexander Hogg, Texas.	J. O'Connor, California.
S. T. Dutton, Connecticut.	Leroy D. Brown, Ohio.	T. O. Hutchinson, Oregon.
George A. Bacon, New York.	W. A. Bell, Indiana.	Z. Richards, Dist. of Columbia.
H. S. Jones, Pennsylvania.	D. S. Howell, Michigan.	W. D. Parker, Wisconsin.
Joseph Clark, New Jersey.	Thomas H. McBride, Iowa.	D. L. Kiehle, Minnesota.
Isaac T. Johnson, Delaware.	W. H. Bartholomew, Kentucky.	J. E. Monox, Dakota.
Henry A. Wise, Maryland.	T. C. Karns, Tennessee.	J. M. Allen, Kentucky.
J. L. Buchanan, Virginia.	D. C. Tillotson, Kansas.	L. S. Cornell, Colorado.
S. D. Brown, West Virginia.	Henry M. James, Nebraska.	
J. H. Carlisle, South Carolina.	S. S. Laws, Missouri.	

DEPARTMENTS.

School Superintendence.

CHARLES S. YOUNG.....	<i>President.</i>	Carson City, Nevada.
N. C. DOUGHERTY.....	<i>Vice President.</i>	Peoria, Ill.
CHARLES C. DAVIDSON.....	<i>Secretary.</i>	Alliance, Ohio.

Higher Instruction.

W. A. MOWRY.....	<i>President.</i>	Boston, Massachusetts.
PETER MCVICAR.....	<i>Vice-President.</i>	Topeka, Kansas.
H. H. FREER, of Cornell College.	<i>Secretary.</i>	Iowa.

Normal Schools.

A. R. TAYLOR, State Normal School.....	<i>President.</i>	Emporia, Kansas.
JAMES H. HOOSE.....	<i>Vice-President.</i>	Portland, N. Y.
MISS MARY NICHOLSON.....	<i>Secretary.</i>	Indianapolis, Ind.

Industrial Education.

J. M. ORDWAY.....	<i>President.</i>	New Orleans, Louisiana.
A. WICKERSHAM.....	<i>Vice-President.</i>	Terre Haute, Indiana.
J. D. WALTERS.....	<i>Secretary.</i>	Manhattan, Kansas.

Art Education.

WALTER S. PERRY.....	<i>President.</i>	Worcester, Mass.
MRS. E. F. DIMOCK.....	<i>Vice-President.</i>	Chicago, Ill.
MRS. L. F. PICKENS.....	<i>Secretary.</i>	Emporia, Kan.

Music Education.

O. S. WESTCOTT.....	<i>President.</i>	Chicago, Ill.
N. COE STEWART.....	<i>Vice-President.</i>	Cleveland Ohio.
HERBERT L. GRIGGS.....	"	Denver, Col.
EDGAR O. SILVER.....	<i>Secretary.</i>	Boston, Mass.

Kindergarten Instruction.

W. N. HAILMANN.....	<i>President.</i>	La Porte, Indiana.
J. W. DICKINSON.....	<i>Vice-President.</i>	Boston, Mass.
MISS S. A. VAN NOTE.....	<i>Secretary.</i>	La Porte, Indiana.

Elementary Schools.

W. H. BARTHOLOMEW.....	<i>President.</i>	Louisville, Kentucky.
MISS ELIZABETH BAUMGARDNER.....	<i>Vice-President.</i>	Illinois.
MISS M. W. SUTHERLAND.....	<i>Secretary.</i>	Mansfield, Ohio.

Secondary Instruction.

GEORGE A. BACON.....	<i>President.</i>	Syracuse, N. Y.
HENRY L. BOLTWOOD.....	<i>Vice-President.</i>	Evanston, Ill.
PAUL H. HANUS.....	<i>Secretary.</i>	West Denver, Col.

National Council of Education.

D. B. HAGAR.....	<i>President.</i>	Salem, Mass.
H. S. JONES.....	<i>Vice-President.</i>	Erie, Penn.
E. W. COY.....	<i>Secretary and Treasurer.</i>	Cincinnati, Ohio.

CONSTITUTION

OF THE

NATIONAL EDUCATIONAL ASSOCIATION

As amended, in conformity to the requirements of the Charter, at the Annual Meeting held at Topeka, Kansas, July 13-16, 1886.*

PREAMBLE.

To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States, we, whose names are subjoined, agree to adopt the following

CONSTITUTION.

ARTICLE I.—NAME.

This Association shall be styled the National Educational Association.

ARTICLE II.—DEPARTMENTS.

SECTION 1. It shall consist of nine departments: the first, of School Superintendence; the second, of Normal Schools; the third, of Elementary Schools; the fourth, of Higher Instruction; the fifth, of Industrial Education; the sixth, of Art Education; the seventh, of Kindergarten Instruction; the eighth, of Music Education; the ninth, of Secondary Education; and a National Council of Education.

SEC. 2. Other departments may be organized in the manner prescribed in this Constitution.

ARTICLE III.—MEMBERSHIP.

SECTION 1. Any person in any way connected with the work of education, or any educational association, shall be eligible to membership. Such person or association may become a member of this Association by paying two dollars and signing this Constitution, and may continue a member by the payment of an annual fee of two dollars. On neglect to pay such fee, the membership will cease.

SEC. 2. Each department may prescribe its own conditions of membership, provided that no person be admitted to such membership who is not a member of the general Association.

SEC. 3. Any person eligible to membership may become a life-member by paying at once twenty dollars.

*The Constitution as here published, embraces also the Amendments made in July, 1880, 1883, 1884, and 1885.

ARTICLE IV.—OFFICERS.

SECTION 1. The officers of this Association shall be a President, twelve Vice-Presidents, a Secretary, a Treasurer, one Councilor for each State, District, or Territory represented in the Association, and the presiding officers of the several departments, and a Board of Trustees to be constituted as hereinafter provided. Any friend of education may become a life-director by the donation of one hundred dollars to the Association at one time, either by himself or on his behalf; and any educational association may secure a perpetual directorship by a like donation of one hundred dollars, the director to be appointed annually or for life. Whenever a life-member desires to become a life-director, he shall be credited with the amount he has paid for his life-membership.

SEC. 2. The President, Vice-Presidents, Secretary, Treasurer, Councilors, Life-Directors, President of the Council, and presiding officers of their respective departments shall constitute the Board of Directors, and, as such, shall have power to appoint such committees from their own number as they shall deem expedient.

SEC. 3. The elective officers of the Association shall be chosen by ballot, unless otherwise ordered, on the second day of each annual session, a majority of the votes cast being necessary for a choice. They shall continue in office until the close of the annual session subsequent to their election, and until their successors are chosen, except as hereinafter provided.

SEC. 4. Each department shall be administered by a President, Vice-President, Secretary, and such other officers as it shall deem necessary to conduct its affairs; but no person shall be elected to any office of any department, or of the Association, who is not, at the time of the election, a member of the Association.

SEC. 5. The President shall preside at all meetings of the Association and of the Board of Directors, and shall perform the duties usually devolving upon a presiding officer. In his absence, the first Vice-President in order who is present shall preside; and in the absence of all Vice-Presidents, a *pro tempore* chairman shall be appointed on nomination, the Secretary putting the question.

SEC. 6. The Secretary shall keep a full and accurate report of the proceedings of the general meetings of the Association and all meetings of the Board of Directors, and shall conduct such correspondence as the Directors may assign, and shall have his records present at all meetings of the Association and of the Board of Directors. The Secretary of each department, shall, in addition to performing the duties usually pertaining to his office, keep a list of the members of his department.

SEC. 7. The Treasurer shall receive and, under the direction of the Board of Trustees, hold in safe keeping all moneys paid to the Association, shall expend the same only upon the order of said Board, shall keep an exact account of his receipts and expenditures, with vouchers for the latter, which accounts ending the first day of July each year, he shall render to the Board of Trustees, and, when approved by said Board, he shall report the same to the Board of Directors. The Treasurer shall give such bond for the faithful discharge of his duties as may be required by the Board of Trustees; and he shall continue in office until the first meeting of the Board of Directors held prior to the annual meeting of the Association next succeeding that for which he is elected.

SEC. 8. The Board of Directors shall have power to fill all vacancies in their own body; shall have in charge the general interests of the Association, excepting those herein entrusted to the Board of Trustees; shall make all necessary

arrangements for its meetings, and shall do all in its power to make it a useful and honorable institution. Upon the written application of twenty members of the Association for permission to establish a new department, they may grant such permission. Such new department shall in all respects be entitled to the same rights and privileges as the others. The formation of such department shall in effect be a sufficient amendment to this Constitution for the insertion of its name in Article II., and the Secretary shall make the necessary alterations.

SEC. 9 The Board of Trustees shall consist of four members, elected by the Board of Directors for a term of four years, and the President of the Association, who shall be a member *ex-officio*, during his term of office. At the election of the Trustees in 1886, one Trustee shall be elected for one year, one for two years, one for three years, and one for four years, and annually thereafter, at the first meeting of the Board of Directors held prior to the annual meeting of the Association, one Trustee shall be elected for the term of four years. All vacancies occurring in said Board of Trustees, whether by resignation or otherwise, shall be filled by the Board of Directors for the unexpired term; and the absence of a Trustee from two consecutive annual meetings of the Board shall forfeit his membership therein. The Board of Trustees thus elected and constituted shall be the executive financial officers of this Association, as a body corporate, as conferred by the certificate of organization under the provisions of the Act of General Incorporation, Class Third, of the Revised Statutes of the District of Columbia, dated the twenty-fourth day of February, 1886, at Washington, D. C., and recorded in Liber No. 4, "Acts of Incorporation for the District of Columbia."

SEC. 10. It shall be the duty of the Board of Trustees to provide for the safe keeping and investment of all funds which the Association may receive from life-directorships, or from donations; and the income of such invested funds shall be used exclusively in paying the cost of publishing the annual volume of Proceedings of the Association, excepting when donors shall specify otherwise. It shall also be the duty of the Board to issue orders on the Treasurer for the payment of all bills approved by the Board of Directors, or by the President and Secretary of the Association, acting under the authority of the Board of Directors; and, when practicable, the Trustees shall invest all surplus funds exceeding one hundred dollars, that may remain in the hands of the Treasurer after paying the expenses of the Association for the previous year.

ARTICLE V.—MEETINGS.

SECTION 1. The annual meeting of the Association shall be held at such time and place as shall be determined by the Board of Directors.

SEC. 2. Special meetings may be called by the President at the request of five Directors.

SEC. 3. Any department of the Association may hold a special meeting at such time and place as by its own regulations it shall appoint.

SEC. 4. The Board of Directors shall hold their regular meetings at the place, and not less than two hours before the assembling of the Association.

SEC. 5. Special meetings may be held at such other times and places as the Board or the President shall determine.

SEC. 6. Each new Board shall organize at the session of its election. At its first meeting a Committee on Publication shall be appointed, which shall consist of the President and the Secretary of the Association for the previous year, and one member from each department.

ARTICLE VI.—BY-LAWS.

By-Laws, not inconsistent with this Constitution, may be adopted by a two-thirds vote of the Association.

ARTICLE VII.—AMENDMENTS.

This Constitution may be altered or amended at a regular meeting by the unanimous vote of the members present, or by a two-thirds vote of the members present, provided that the alteration or amendment has been substantially proposed in writing at a previous meeting.

BY-LAWS.

1. At each regular meeting of the Association there shall be appointed a Committee on Nominations, one on Honorary Members, and one on Resolutions.
2. The President and Secretary shall certify to the Board of Trustees all bills approved by the Board of Directors.
3. Each paying member of the Association shall be entitled to a copy of its Proceedings.
4. No paper, lecture, or address shall be read before the Association or any of its departments in the absence of its author, nor shall any such paper, lecture, or address be published in the volume of Proceedings without the consent of the Association, upon approval of the Executive Committee.

The following members were elected Trustees, in accordance with the Constitution :

N. A. CALKINS, Chairman, 124 East 80th St, New York, for four years.

HORACE S. TARBELL, Providence, R. I., for three years.

ZALMON RICHARDS, Secretary, Washington, D. C., for two years.

JOHN EATON, Washington, D. C., for one year.

WM. E. SHELDON, Boston, Mass., President, *ex-officio*.

INCORPORATION OF THE ASSOCIATION.

At a meeting of the Board of Directors of the National Educational Association held at Saratoga Springs, N. Y., July 14, 1885, the following resolution was passed :—

Resolved, that a Committee of three be appointed to secure articles of incorporation for the National Educational Association, under United States or state laws, as speedily as may be.

N. A. Calkins of New York, Thomas W. Bicknell of Massachusetts, and Eli T. Tappan of Ohio were appointed said Committee.

Under authority as above, and with the approval of the Committee, and by competent legal advice, the chairman obtained a

CERTIFICATE OF INCORPORATION.

We the undersigned, Norman A. Calkins, John Eaton, and Zalmon Richards, citizens of the United States, and two of them citizens of the District of Columbia, do hereby associate ourselves together pursuant to the provisions of the Act of General Incorporation, Class Third, of the Revised Statutes of the District of Columbia, under the name of the *National Educational Association*, for the full period of twenty years, the purpose and objects of which are to elevate the character and advance the interests of the profession of teaching and to promote the cause of popular education in the United States: To secure the full benefit of said Act we do here execute this our Certificate of Incorporation as said Act provides.

In witness whereof we severally set our hands and seals this 24th day of February, 1886, at Washington, D. C.

NORMAN A. CALKINS, [L. S.]

JOHN EATON, [L. S.]

ZALMON RICHARDS, [L. S.]

DISTRICT OF COLUMBIA, SS.

On this 24th day of February, A. D. 1886, before me, a Notary Public in and for said District, personally appeared Norman A. Calkins, John Eaton, and Zalmon Richards, all personally well known to me, and they severally acknowledged to me that they executed the above instrument, and acknowledged the execution thereof to be their act and deed.

Given under my hand and official seal the 24th day of February, A. D. 1886.

MICHAEL P. CALLAN.

Notary Public.

The three Incorporators met at Washington, D. C., February 25, 1886, made a preliminary organization by choosing N. A. Calkins, chairman, and Zalmon Richards, secretary. They then resolved to meet at Topeka, Kansas, July 13, 1886, and submit to the Board of Directors the matter and manner of perfecting the organization of the Association under the Corporate Powers secured by the Certificate of Incorporation.

The report of the Committee on Incorporation, presented by the Chairman, was accepted by the Board of Directors, and a special committee appointed to prepare and present the changes in the Constitution necessary to conform to the requirements of the charter. The report on said changes was made to the Association at the meeting held July 15, 1886, and the several amendments to the Constitution submitted were unanimously adopted.

MEMBERSHIP

OF THE

NATIONAL EDUCATIONAL ASSOCIATION.

The *dates* in the margin indicate the year when the several memberships began. The addresses given are the same as last year, except in cases where information of change of residence has been furnished. Where there is a reasonable doubt as to residence, it is indicated by (?). The * indicates the decease of the member. The names printed in *Italics* represent those who attended the meeting at Topeka.

PERPETUAL DIRECTORSHIP.

PENNSYLVANIA.

1879. Philadelphia Teachers' Institute.

LIFE DIRECTORS.

KANSAS.

1886. *Fairchild, Geo. T.*, Manhattan. 1886. *Taylor, A. R.*, Emporia.
1886. *Jewett, A. V.*, Abilene.

MISSOURI.

1886. *Greenwood, J. M.*, Kansas City.

NEW MEXICO.

1877. *Marshall, T. Marcellus*, Chamita.

NEW YORK.

1881. *Rickoff, Andrew J.*, Yonkers.

LIFE MEMBERSHIPS.

ALABAMA.

1881. Woodward, G. A., Selma (P).

COLORADO.

1883. Gove, Aaron, Denver.

CONNECTICUT.

1894. Barnard, Henry, Hartford. 1870. Stone, Mrs. M. A., New Milford.
 1884. Northrop, Birdsey G., Clinton.

DISTRICT OF COLUMBIA.

1884. Bell, Alex. Graham, Wash- 1804. Richards, Zalmon, Washington.
 ton.
 1880. Hitz, John, Washington. 1880. Wilson, J. Ormond, Washington.

GEORGIA.

1881. Mallon, Mrs. Frances C., 16 1880. Setzepfand, A., Dalton (?).
 E. Cain St., Atlanta.

ILLINOIS.

1870. Allen, Ira W., 1832 Michigan 1876. Forbes, Alex., 369 Wabash Ave.,
 Boulevard, Chicago. Chicago.
 1884. Allyn, Robert, Normal School, 1884. Hayward, Emily A., Springfield.
 Carbondale. 1884. Hewett, Edwin C., Normal.
 1884. Cheney, Augustus J., 149 Wa- 1884. Raab, Henry, State Supt., Spring-
 bash Ave., Chicago. field.
 1864. Eberhardt, J. F., Irving Park, 1876. Schmitz, J. Adolph, Elgin.
 Chicago. 1864. * White, S. H.

INDIANA.

1876. Bell, W. A., Indianapolis. 1879. * Mills, Caleb.
 1880. Brown, Geo. P., Terre Haute. 1877. Smart, James H., La Fayette.
 1870. Hobbs, B. C., Bloomington. 1876. Stevens, M. C., La Fayette.
 1880. Irwin, J. S., Ft. Wayne. 1876. Thompson, L. S., La Fayette.
 1866. McRae, H. S., Marion.

IOWA.

1876. Armstrong, Allen, Sioux City. 1884. Taylor, Henry J., Sioux City.
 1870. Crosby, W. E., Des Moines (?). 1804. * Wells, D. F.
 1880. Gilchrist, J. C., Cedar Falls. 1884. Willis, Wm. A., Iowa City.
 Pickard, J. L., Pres. Univer-
 sity, Iowa City.

KANSAS.

1886. Campbell, A. G., Council 1886. Meade, Prof. Richard C., Atchi-
 Grove. son.
 1886. Carruthers, Mrs. A. J., Salina. 1886. Miller, Pres. J. H., Holton.
 1886. Clark, Frank Howard, Beloit. 1886. Roop, C. Y., Holton.
 1886. Coorer, N., Wilson. 1886. Rose, Geo. E., Rosedale.
 1886. Fairchild, Edward T., Ells- 1886. Sachill, Thos. Alex., Concordia.
 worth. 1886. Schuyler, Dr. A., Salina.
 1886. Jay, Walter M., Wellington. 1886. Stanley, Prof. Edmund, Law-
 1886. Klock, J. E., Emporia. rence.
 1886. Larimer, Henry G., Topeka. 1883. Taylor, A. R., Emporia.
 1886. Limerick, A. H., Winfield. 1886. Tillotson, D. C., Topeka.
 1886. Macdonald, John, Topeka. 1886. Vail, Rt. Rev. Thos. H., D. D.,
 1886. McVicar, Rev. Peter, D. D., Topeka.
 Topeka. 1886. Williams, Philo Jesse, Lawrence.

KENTUCKY.

- | | |
|--|---|
| 1877. <i>Bartholomew, W. C.</i> , Female
H. S., Louisville. | 1877. <i>Monsarrat, Mrs. L. L.</i> , Louis-
ville. |
| 1877. <i>Kalfus, Anna F.</i> , 732 Second
St., Louisville. | |

MARYLAND.

- | | |
|---|---|
| 1876. <i>Newell, M. A.</i> , Normal School,
Baltimore. | 1876. <i>Richmond, Sarah E.</i> , Baltimore
(?). |
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MASSACHUSETTS.

- | | |
|---|---|
| 1882. <i>Bicknell, Thos. W.</i> , Boston. | 1886. <i>Mowry, Wm. A.</i> , 3 Somerset St.,
Boston. |
| 1864. <i>Hagar, Daniel B.</i> , Normal
School, Salem. | 1865. <i>Sheldon, Wm. E.</i> , 3 Somerset St.,
Boston. |
| 1876. <i>Harris, Wm. T.</i> , Concord. | 1870. <i>Tourjee, Eben</i> , Boston. |
| 1870. <i>Jones, D. W.</i> , Roxbury, Boston. | 1870. <i>Wilcox, M. C.</i> , Boston (?). |
| 1880. <i>Marble, Albert P.</i> , Supt.
Schools, Worcester. | |

MICHIGAN.

- | | |
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| 1870. <i>Heywood, C. W.</i> , Scotts, Kala-
mazoo Co. | 1866. <i>Mayhew, Ira</i> , 119 Griswold St.,
Detroit. |
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MINNESOTA.

1870. *Phelps, Wm. F.*, St. Paul.

MISSOURI.

- | | |
|---|---|
| 1880. <i>Bibb-Sudborough, Grace C.</i> ,
Omaha (?). | 1870. * <i>Read, Daniel</i> . |
| 1886. <i>Evans, Chas. H.</i> , 914 Olive St.,
St. Louis. | 1876. <i>Rollins, James S.</i> , State Univer-
sity, Columbia. |
| 1864. <i>Pennell, C. S.</i> , 3692 Pine St.,
St. Louis. | 1877. <i>Soldan, F. Louis</i> , Normal School,
St. Louis. |

NEBRASKA.

- | | |
|---|---|
| 1876. <i>Beals, S. D.</i> , 2118 Davenport
St., Omaha. | 1884. <i>James, Henry M.</i> , Supt. Schools,
Omaha. |
| 1884. <i>Curry, Robert</i> , Palmyra. | |

NEW HAMPSHIRE.

1876. *Rounds, C. C.*, Normal School, Plymouth.

NEW JERSEY.

1880. *Spring, E. A.*, Perth Amboy.

NEW YORK.

- | | |
|---|---|
| 1871. Anderson, John J., 343 Adelphi St., Brooklyn. | 1882. Hodgdon, Josephine E., High School, Brooklyn. |
| 1864. Bradley, P., Lyons (?). | 1879. Hoose, James H., Normal School, Cortlandt. |
| 1879. Calkins, N. A., 124 E. 80th St., New York. | 1885. Hunter, Thomas, Normal College, New York. |
| 1880. Coe, Miss E. M., Bible House, New York. | 1879. Kraus, John, 7 E. 22d St., New York. |
| 1883. Corey, Lucien B., Hicksville, Queens Co. | 1882. Morris, Hattie N., Brooklyn. |
| 1864. Cruikshank, James, Oxford St., Brooklyn. | 1870. Rickoff, Andrew J., Yonkers. |
| 1864. Danforth, Edward, Elmira. | 1880. Rickoff, Mrs. R. D., Yonkers. |
| 1883. Day, Mrs. Albert, 240 Broadway, New York. | 1883. *Steele, J. Dorman. |
| 1873. Dorna, G. Videlia, New York (?). | 1882. Stern, M., 27 E. 44th St., New York. |
| 1873. *Haines, Mrs. H. B. | 1884. Van Akin, Mrs. G., 63 Park St., New York. |

NORTH CAROLINA.

1881. Bingham, Robert, Bingham School.

OHIO.

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| 1870. Arey, Oliver, Cleveland. | 1883. Harvey, Thomas W., Painesville. |
| 1884. Bennett, C. W., Supt. Schools, Piqua. | 1876. *Henkle, W. D. |
| 1880. Bennett, Hampton, Franklin. | 1870. Holden, L. E., Cleveland. |
| 1880. Brown, LeRoy D., Columbus. | 1879. McMillan, Reuben, Youngstown. |
| 1880. Burns, J. J., Supt. Schools, Dayton. | 1880. McMillan, Mrs. S., Youngstown. |
| 1870. Cole, W. H., Marysville. | 1880. Miller, Lewis, Akron. |
| 1883. Coy, Eliab W., Hughes H. S., Cincinnati. | 1880. *Norris, J. A. |
| 1866. Curran, U. T., Sandusky. | 1880. Peaslee, John B., Cincinnati. |
| 1880. Davidson, C. C., Alliance. | 1882. Robert, J. A., Dayton. |
| 1881. DeWolf, Daniel F., Columbus (?). | 1880. Stevenson, R. W., Supt. Schools, Columbus. |
| 1880. Dutton, Bettie A., 94 State St., Cleveland. | 1882. Tappan, Eli T., Kenyon College, Gambier. |
| 1876. Hancock, John, Dayton. | 1870. White, Emerson E., Walnut Hills, Cincinnati. |
| 1865. Hartshorn, O. N., Mt. Union. | 1880. Widner, Esther, Dayton. |
| | 1870. Williams, Mrs. D. A. (Lathrop), Delaware. |

PENNSYLVANIA.

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| 1876. Brooks, Edward, 1416 Chestnut St., Philadelphia. | 1879. Paxson, Joseph A., Philadelphia. |
| 1879. Foster, Rachel Gordon, Philadelphia (?). | 1879. Shippen, Edward, Philadelphia. |
| 1879. Gratz, Simon, Philadelphia. | 1880. Singer, Edgar A., 4764 Penn. St., Philadelphia. |
| 1865. Ingram, S. D., Harrisburgh. | 1865. Wickersham, James P., Lancaster. |
| 1880. Partridge, Lelia E., West Philadelphia. | |

RHODE ISLAND.

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| 1865. *Greene, Samuel S. | 1872. Stone, E. M., Providence. |
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TEXAS.

1877. Franklin, M. B., Grapevine (?).

VIRGINIA.

1870. Manly, R. M., Richmond. 1870. * McGuffey, W. H.

WISCONSIN.

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| 1884. Albee, Geo. S., Normal School, Oshkosh. | 1884. Howland, H. C., Eau Claire. |
| 1884. Aylward, John Arthur, Black Earth. | 1870. Hoyt, J. W., ——— (2). |
| 1884. Bascom, John, Pres. University, Madison. | 1884. Nye, Charles H., Platteville. |
| 1884. Beck, George, Platteville. | 1884. Parker, Warren D., River Falls. |
| 1884. Carpenter, J. H., Madison. | 1884. Parkinson, John B., Madison. |
| 1884. Chandler, W. H., Madison. | 1884. Rusk, Gov. J. M., Madison. |
| 1884. Charlton, E. A., Brodhead. | 1884. Shaw, Samuel, Antigo. |
| 1884. Clark, L. H., Tomah. | 1884. Stark, Joshua, Milwaukee. |
| 1884. Eden, Philip, Platteville. | 1884. Stewart, Sarah A., Milwaukee. |
| 1884. Emery, J. Q., Fort Atkinson. | 1884. Stewart, I. N., Appleton. |
| 1884. Flavin, J. T., Watertown. | 1881. Stearns, J. W., University, Madison. |
| 1884. Graham, Robert, State Supt., Madison. | 1884. Thayer, J. B., River Falls. |
| 1884. Harvey, Lorenzo Dow, Sheboygan. | 1884. Twining, N. C., Monroe. |
| | 1884. Whitford, Wm. C., Pres. College, Milton. |

PERPETUAL MEMBERSHIPS.

KANSAS.

1886. Dodge City Schools, Dodge City.
 1886. Board of Education, Ottawa.
 1886. Cowley County Teachers' Association, Winfield.
 1886. President Board of Education, Abilene.
 1886. Sedgwick City Schools, Sedgwick City.
 1886. Riley County Teachers' Association, Manhattan, J. H. Lee, Representative for 1886.

WISCONSIN.

1884. Board of Education—City of Milwaukee.
 1884. Board of Education—City of Janesville, C. H. Keyes, Representative for 1886.
 1884. Board of Education—City of Oshkosh.
 1884. Board of Education—City of La Crosse.
 1884. Board of Education—City of Beloit.
 1884. Board of Education—City of Watertown.
 1884. Alumni Association of City Normal School of Milwaukee.
 1884. Athenæum Literary Society, State Normal School, Platteville.
 1884. Board of Regents of State Normal Schools of Wisconsin.
 1884. Milwaukee County Teachers' Association.
 1884. Milwaukee Spencerian Business College.
 1884. Principals' Association of Milwaukee.
 1884. Intermediate and Upper Sections, Milwaukee Teachers' Corps.
 1884. Primary Section, Milwaukee Teachers' Corps.
 1884. Philadelphian Society, State Normal School, Platteville.
 1884. Public School Teachers of Janesville.
 1884. State Normal School, Platteville.
 1884. Wisconsin Principals' Association, Madison.
 1884. Wisconsin Teachers' Association.
 1884. Wisconsin County Superintendents' Association.

ANNUAL MEMBERSHIPS

FOR THE YEAR ENDING JULY 1st, 1887.

ALABAMA.

Councill, W. H., Huntsville.

ARKANSAS.

Brooks, Ida Joe, Little Rock.
Cunningham, Clara, Ft. Smith.
Hayes, Geo. A., Texarkana.
Howell, Julius F., Fayetteville.

Purington, George D., Fayetteville.
Smith, Miss R. T., Little Rock.
Taff, J. L., Fayetteville.
Veatch, Nathan T., Little Rock.

CALIFORNIA.

Barnard, Mary H., Los Angeles.
Farquharsen, C. D., San Francisco.

O'Connor, Joseph, San Francisco.
Sheldon, Frank P., San Francisco.

COLORADO.

Abbott, J. M., Silver Plume.
Baker, James H., Denver.
Beggs, R. H., Denver.
Byington, E. L., Colorado Springs.
Cornell, Leonidas S., Denver.
Dennett, Prof. Isaac C., Boulder.

Edmunds, Mary A., 777 Lawrence
St., Denver.
Gault, F. B., South Pueblo.
Griggs, Herbert, Denver.
Hanus, Paul H., Denver.
Hovey, Louise J., Denver.

CONNECTICUT.

Banta, J. Edward, Rockville.
Bartholomew, Mrs. D. D., Branford.
Bartholomew, Miss Laura H., Bran-
ford.
Burr, Horace, Winchester.
Burr, Stephen D., Haddam.
Case, Lorinda, Collinsville.
Chapman, Mary C., Waterbury.
Cosgrove, Leonard W., New Haven.
Doty, Lavina, Danbury.
Dutton, S. T., New Haven.
Foster, James M., 74 Front St., Hart-
ford.
Guy, James K., Middletown.
Hale, Carlos, 198 Main St., Middletown.

Hitchcock, Mrs. L. A., Meriden.
Humes, Ellen E., Hartford.
Mallory, Aaron P., Box 633, Bir-
mingham
Mallory, Mrs. Aaron P., Box 633, Bir-
mingham.
Richardson, Erving L., Principal
North School, New Hartford.
Smith, Mrs. H. T., Meriden.
Spencer, W. G., Portland.
Todd, Hattie A., Stanford.
Wells, H. L., 37 College St., New
Haven.
Whiting, Mrs. Anule E., Water-
bury.

DAKOTA TERRITORY.

Bishop, James S., Huron.	Crocker, W. G., Wahpeton.
Carr, Hon. Lauren D., Brayton,	Maunich, J. E., Elk Point.
Sully Co.	McCartney, L., Sioux Falls.

DELAWARE.

Day, Almeda E., Dover.	Morris, M. DeHaven, Wilmington.
Johnson, Isaac T., 4th and West Sts.,	Wilson, Henry R., 3 West 7th St.,
Wilmington.	Wilmington.

DISTRICT OF COLUMBIA.

Chapman, G. W., 239 N. Capital St.,	Noteman, H. E., Washington.
Washington.	Schimmelfening, H. L., Normal
Chapman, E. G., 1235 Mass. Ave.,	School, Washington.
Washington.	Wines, William, Geol. Survey,
Eaton, Hon. John, Washington.	Washington.
M'Curdy, Jessie A., Washington.	

FLORIDA.

Fish, J. L. A., Pres. Florida Ins., Live Oak.

GEORGIA.

Orr, Gustavus J., Atlanta.	Patton, Chas. L., Atlanta.
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IDAHO TERRITORY.

Williamson, Mary E., Junction.

ILLINOIS.

Allen, Miss G. B., Prospect Park.	Boyakin, Louisa A., Belleville.
Allen, Lou. M., DeKalb.	Boyer, E. R., Lewistown.
Allyn, Ellen S., Carbondale.	Braunersreuther, Miss L., Belleville.
Andrews, M., 36 Oakwood B'v'd,	Brayton, Mrs. Sarah T., 638 W. Jack-
Chicago.	son, Chicago.
Bartholf, C. S., Emerson School.	Brewer, Orville, 170 State St., Chicago.
Chicago.	Brockway, Mrs. L. T., Times Build-
Barton, R. L., Peru.	ing, Chicago.
Baumgardner, Elizabeth, Springfield.	Brooks, Andrew M., Springfield.
Bevans, Homer, Englewood.	Browder, Carrie, Paris.
Bishop, J. A., Moline.	Burgess, G. A., Monticello.
Boltwood, Henry L., Evanston.	Burns, James C., Greenville.
Bostwick, O. P., Galena.	Busch, Mrs. Anna, Belleville.
Bowles, J. T., Decatur.	Button, W. J., 379 Wabash Ave., Chi-
Bowman, Miss H. L., Topeka.	cago.
Bowman, S. Annette, Normal.	Canfield, Alice B., Rock Falls.

- Clark, Florence J., DeKalb.
 Clark, Frank A., Mendota.
 Cook, Miss A. F., Rock Island.
 Crowder, J. J., Springfield.
 Curtis, John L., DeKalb.
 Daugherty, N. C., Peoria.
 Davidson, Martha W., Rock Island.
 Decker, Henry A., cor. 12th and Jackson Sts., Springfield.
 DeMotte, Prof. H. C., 297 Monroe St., Quincy.
 Dillman, L. M., Chicago.
 Dimock, Mrs. E. F., Supervisor of Drawing Public Schools, Chicago.
 Dodge, Chester C., Oakley School, Chicago.
 Dow, Julia, Alton.
 Elliott, D. S., Belleville.
 Elliott, Mrs. D. S., Belleville.
 Evans, Mary, Belleville.
 Feltshans, F. R., Springfield.
 Fillmore, Emily E., Belleville.
 Finley, Miss E. C., Carbondale.
 Fisher, Peter, Waukegan.
 Fisher, Mrs. Peter, Waukegan.
 Fisk, Hubert F., Evanston.
 Flanagan, A., 163 Randolph St., Chicago.
 Foster, Martha, Maquon.
 French, George H., Carbondale.
 Gibson, John W., Decatur.
 Gillan, Silas Y., Danville.
 Ginn, F. B., Chicago.
 Graves, Mary E., Earl.
 Grimshaw, Elizabeth C., 63 N. 6th St., Quincy.
 Grueney, C. I., Sandwich.
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 Merwin, J. B., St. Louis.
 Monson, Thos. C., Camden Point
 Morris, J. M., Ash Grove.
 Morrison, N. J., Springfield.
 Morrow, Stella, Warrensburgh.
 Mountjoy, John C., Independence.
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 Louis.
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 Richardson, Wm., Sedalia.
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 Rothwell, W. R., Liberty.
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 Steele, Robert R., Mound City.
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 Whitaker, John, Weaubleau.
 Williams, Effie, Houstonia.
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 Sts., St. Louis.
 Wolfe, Lloyd E., Moberly.

MONTANA TERRITORY.

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 Hicks, Lewis E., Lincoln.
 Higley, Addie, Kearney.

Jones, W. W. W., Lincoln.
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 Leach, Anna E., Irvington.
 Lewis, E. O., Verdom.
 Livingston, W. H., Norfolk.
 Manatt, Irving J., Lincoln.
 Marshall, Elvira, Kennard.
 Meck, S. R., Holdredge.
 Miller, Sarah E., Beatrice.
 Parker, Alvint W., Elkhorn Station.
 Rees, Margaret, Stella, Richardson Co.
 Rich, W., Auburn.
 Ward, John C., Auburn.

NEW HAMPSHIRE.

Bingham, G. W., Derry.
 Calley, Miss E. B., Bristol.
 Garrett, Miss E. W., Portsmouth.
 Garrett, Miss M. F., Portsmouth.
 Hanscom, Miss A. S., Portsmouth.

Marden, A. E., Meriden.
 Merrill, Mrs. Ezra F., Stratford.
 Murphy, Chas. H., Manchester.
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 Fisher, Lizzie R., Woodbury.
 Geyer, Wm. E., Stevens' Ins., Hoboken.
 Goffe, Mary J., Irvington.
 Gould, Mrs. P. W., Vineland.

Gould, Solon S., Vineland.
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 Headley, Joseph A., Union.
 Hitchner, Edgar J., Clayton.
 Holmes, B., Elizabeth.
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 Mann, Riborg, Orange.
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NEVADA.

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OHIO.

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 Wharton, Joseph S., Marysville.
 White, Wm. E., Cincinnati.
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- Miller, J. O., York, Pa.
- Miller, Mrs. J. O., York, Pa.
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- Payne, Mrs. Henry C., Roxborough, Philadelphia.
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- Seip, Martha, 1214 Wallace St., Phila.
- Seip, Louisa, 1214 Wallace St., Phila.
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RHODE ISLAND.

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 Tarbell, Horace S., Providence.
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SOUTH CAROLINA.

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TENNESSEE.

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- Garrett, W. R., Nashville.
 Karns, T. C., Knoxville.
 Sampson, E. R., Memphis.

TEXAS.

- Baldwin, Dr. Joseph, Huntsville.
 Brown, Rosa L., Fort Worth.
 Cox, Carrie L., Granbury.
 Gallagher, J. N., Waco.
 Hogg, Alex., Fort Worth.
 Jones, Miss E. M., Waco.
 Kealing, H. T., Hempstead.
 McCoy, Lulu, Huntsville.
- Mood, Prof. Francis A., Georgetown.
 Mood, Miss K. M., Georgetown.
 Reynolds, C. B., Fort Worth.
 Sellers, H. Lee, Galveston.
 Venable, Mrs. Kate R., Denison.
 Venable, Miss M. S., Denison.
 Willison, Miss Henrie, Huntsville.

UTAH TERRITORY.

- Aird, H. M., Heber City.
 Anderson, Edward H., Ogden.
- Huse, Isaac, Jr., Salt Lake City.

VERMONT.

Hardy, A. L., St. Johnsbury.
Hardy, Mrs. A. L., St. Johnsbury.

Otis, Joseph P., West Burke.

VIRGINIA.

Buchanan, John L., Richmond.
Dreher, Julius D., Salem.

Reeves, Prof. Chas. F., State College,
Center Co.

WASHINGTON TERRITORY.

Abbott, Eva H., Walla Walla.

WEST VIRGINIA.

Furbee, James S., Mannington.
Grayum, Florence, Charleston.

Lazzell, I. G., Morgantown.

WISCONSIN.

Clement, Ernest W., Beaver Dam.
Dame, M. L., Racine.
Dudgeon, R. B., Hudson.
Een, Andrew P., Amherst.
Gillespie, Mary J., Waukesha.
Greene, Mame E., Darlington.
Guy, Mrs. C. V., River Falls.
Haylett, Everett G., Sheboygan.
Lange, A. F., Racine.
McGovern, Mary, Madison.

Reed, Geo. H., Waukesha.
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WYOMING TERRITORY.

Master, Mrs. May, Cheyenne.

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ADDRESSES, PAPERS

—AND—

DISCUSSIONS

OF THE

NATIONAL EDUCATIONAL ASSOCIATION

AND ITS

DEPARTMENTS.

1886.

ADDRESSES AND PAPERS OF THE GENERAL ASSOCIATION.

OPENING SESSION AT TOPEKA, KANSAS.

GOVERNOR JOHN A. MARTIN addressed the Association as follows:—

Ladies and Gentlemen:

The unexpected postponement of an official engagement has enabled me to meet with you this evening, and, through the courtesy of your Executive Committee, I have been chosen to preside at this meeting.

I am very glad to know that the "Schoolmaster is abroad" to-day; and I rejoice, especially, to meet and greet the master and mistress of so many American schools.

I rejoice for several reasons. This great assemblage of teachers shows how deep and earnest is the interest you have in your profession, and it is, therefore, a happy and hopeful indication that the educational work of the land is in good hands. I am glad that you selected Kansas as your meeting place, because Kansas is an object-lesson that will impress itself upon your minds and hearts forever. And I rejoice over your coming, because I know that you will return to your homes and your work with larger, broader views of our country, and of that splendid system of schools which has made it what it is.

The people of Kansas are proud of many things pertaining to their State, but above everything else they place their schools. The loneliest region on our receding frontier has never been without its schoolhouse—a dug-out or sod house, at first, perhaps, and these vanishing with the buffalo-grass, have given place to schoolhouses, always comfortable, and generally the most stately buildings in the neighborhood. Indeed, it is the boast of Kansas that the best building in every town and hamlet is the schoolhouse, and we have eight thousand of them. They dot every hill-side and valley, and account

for the fact that, in Kansas, the proportion of people unable to read and write is smaller than in any other state of the Union except one.

I will not, however, occupy your time by attempting to make a speech. I take pleasure in introducing to you my friend, Col. W. H. Rossington, who, on behalf of the people of Kansas and of Topeka, will formally welcome you to the State and to its Capital city.

ADDRESS OF WELCOME.

BY HON. W. H. ROSSINGTON.

Mr. President, Ladies and Gentlemen :

In behalf of the State of Kansas, and the City of Topeka, I have been honored by being charged with the pleasant duty of welcoming to the capital city of Kansas the members of this Association; a body of men and women more distinguished perhaps for learning, ability, and zeal for the welfare of humanity, than any that ever assembled in our State. I have, however, been impressed with the thought that my poor service in this behalf is unnecessary. You need no welcome to Kansas. Your sojourn here is like unto that of a victorious army camping upon a field it has won; for, Kansas, socially and politically, may be fairly said to be the procreant result of the educational idea. This nation was at the threshold of its existence inexorably committed to the scheme of universal education. For in no other way could the founders hope to justify or sustain the challenge then made to the old world to erect a government founded upon the free will of the governed, wherein should exist perfect political equality, and which should vindicate by its continued and prosperous life the sovereignty of mere manhood. The old world idea was that universal education was not only Utopian and impossible but highly undesirable, because with knowledge would come discontent with that poverty to which the great mass of human beings is born. It was, moreover, believed that political equality would furnish discontent its opportunity.

But we had then, and have now, no choice. Whatever the potential dangers of universal education to the safety of our national fabric, the possible evils of limited and class education are so much greater to the success of our vast experiment that we must go on as we have begun. Since, then, it is a national duty to provide that all are in some measure educated, there has arisen among those conceding this principle, a controversy as to how much education and what sort of education should be publicly furnished. It is generally admitted that illiteracy is an evil, but many deny that the public should furnish the largest opportunity for education to every child. A few would limit the public duty to affording out of the public revenue the commonest sort of common school education. The Kansas educational idea is perhaps as enlarged and liberal as that of any state in the Union, and it may be briefly stated to be, to give to every boy and girl entitled to school privileges in the state, the best education he or she will take.

When the first band of hardy pioneers looked upon this land all vacant and rolling in verdant, silent billows to the horizon, and saw that it was good, one of their earliest thoughts was of schools; and not only of schools but of universities, for the mental nurture and development of the future generation of freemen who should inherit the benefits and burdens of the great State they were about to build. The framers of our present state constitution gave most deliberate and earnest thought to two institutions upon which the society, for whose government they were providing, was mainly to rest, namely, the home and the school. The first rude, sod schoolhouse, built by the hardy pioneers where Lawrence now stands, in the spring of 1855, was raised by men who did not come to the wilderness to lapse into barbarism, but who meant to transplant New England culture into this new and fruitful soil, hoping and trusting that it might some day outgrow the parent stock. Poor and rude as was this foundation, it was the forerunner of a university of which the president of Harvard is reported to have recently said that "it perhaps had but one superior in the West, the university at Ann Arbor, Michigan."

You being, for the most part, people from other states, I would be recreant to my duty as a Kansan if I let you escape without impressing upon you certain statistics dating from that solitary, sod schoolhouse of thirty years ago. Kansas always comes out strong on figures. Some one has said that the chief use of statistics is to beat some other man's statistics. It has been suspected that our phenomenal success

in raising wheat and corn has been largely stimulated by the demand for these cereals in statistical tables. You need not be alarmed however, for these figures will be brief and poetic, almost, in their suggestiveness. They are perhaps known to most of you, for Kansas does not conceal the facts of her growth. I compile them from a recent address of Governor Martin and you may accept them, therefore, as official. Beginning with the one sod schoolhouse in 1855, in 1860 we had 154 schoolhouses, (presumably of a similar kind, because the Governor does not set their money value down as anything.) 189 teachers, and 5,915 scholars. Without detaining you with the figures showing the intermediate growth, we had in 1885, 6,673 schoolhouses, 8,219 teachers, 335,176 scholars, and school buildings valued at \$6,734,176. In 1861 we expended less than \$2,000 for the support of schools, our able-bodied citizens being just then engaged in another important educational enterprise, to wit: in teaching our southern brethren that this is a nation one and inseparable. Several excellent gentlemen here present bear cordial testimony to how well this lesson has been learned. In 1885 we expended nearly three million dollars, and our total expenditure for the first twenty-five years of the State's existence for the support of public schools was \$30,214,202.40. My friend, D. W. Wilder, who knows all that is worth knowing about the building of Kansas, recently called my attention to the significant fact that you can best trace the advancing settlements in every county in the State by following the numbers of the school districts, which also sustains my statement that the first consideration of every Kansas community is its school.

As a result of this magnifying the office of the schoolmaster in Kansas, our illiterates over the age of ten years in the State comprise not more than two per cent. of our population, notwithstanding it has been increased recently by a large addition of the freedmen of the South.

You will not hold it presumption upon my part, I trust, if, as a layman, I express a few thoughts which occur to me upon the subject of your most useful and beneficent profession, but will bear with me, although these thoughts should turn out to be trite and commonplace to you. I have said that the experiment of free government at its inception seemed to involve of necessity the education of the masses. I understand the purpose of your organization to be chiefly to promote this great national object. Your hearts are in the work; you bear the

torch aloft and would fill the whole land with its effulgence. I have no words to fitly praise your exalted calling; I could not criticise it if I were worthy to do so. What I may properly say has probably occurred to most of you and has doubtless been seriously considered by each of you before this evening. If popular education is essential to the stability of our government, then the instructors of the land have resting upon them at this moment a great responsibility, for I need not tell you, as acute and observing citizens, that we are fast approaching, if we have not already approached, a crisis in our national existence. I allude, of course, to the prevalent contest between labor and capital. Pray do not suppose that I am going to hold you responsible for these disturbances, but the thought which occurred to me was that in your hands largely lay the corrective. The generation you now have in training will quickly step upon the stage. They should come to their share of the world's work not only mentally fitted to do it with success, but their moral natures should be braced, their love of country fully developed, and they should fully value and be prepared to resolutely preserve justice and public order. Two of the greatest instructors in Great Britain were Doctor Arnold and Doctor Birch. Two of the greatest in this country were Doctor Nott and Mark Hopkins. Their great distinction came not so much from the sound scholarship of their pupils, as from the sterling manhood and high character they imbued them withal. You might say that character is chiefly the result of home training. True, but it may be so supplemented by the teacher, that those most important elements of the true citizen, patriotism and respect for and obedience to law, shall not be wanting. Since the war that saved the country, unselfish patriotism as a science has fallen into neglect. A class of sudden millionaires, made so by chicanery and sharp practice, by overriding laws, by diverting and monopolizing the national resources, has made the people of the country either envious to share its prosperity by aid of the same illicit means, or if not fitted for such an effort to become disaffected and rebellious and patent to the malign influences of foreign socialists. Of this foreign socialism, which threatens to poison our national life and blight our allegiance to our institutions, a recent French writer has said: "It [socialism] has become a kind of cosmopolitan religion. It oversteps frontiers, it obliterates race antipathies, and above all it eradicates patriotism and tries to efface the very idea of it. Fellow countrymen are enemies if they are employers; foreigners are brothers if they live by wages." That this is the effect of socialistic influence, recent

events abundantly demonstrate. It is totally un-American and subversive of everything national which we have been accustomed to hold as sacred and essential. The treatment of this evil must be radical. The roots of this foreign, poisonous growth must be torn from our soil or it will choke and destroy our national life.

After all, ladies and gentlemen, what is education if it is not the establishment of character? To what end do you produce bright scholars, if they do not also come from your forming and directing hand, good citizens as well? These new theories and ideas so seductive to the working people are false and fallacious. True instruction and enlightenment to the approaching generation, now at its receptive age, will be like Paris Green upon the curculio. It will destroy the next crop of eggs and the pest will go with it. It is a disease resulting in large part from our sudden and unexampled national prosperity. I have too much faith in my country to believe that it will be more than a temporary menace. But it may happen that by reason of it we as a nation may get very sick before we are well of it. You have the prophylactic in your hands, and as the cause of education is indissolubly welded with the cause of our national life, you should subserve and vindicate both by applying it diligently.

Proceeding from the same source, viz.: too sudden and too great national prosperity, are other evils which address themselves, it seems to me, to your practical consideration. The complex and ornate methods of modern life have largely diminished the reverence for knowledge and learning merely as such. The practical education is now most sought after. A course at school is estimated more than ever at its money producing value. While this practical consideration should not be overlooked, while it is true, as Doctor Johnson said, that a man cannot be more innocently and justly employed than in the honest getting of money, and while it is furthermore true that one should acquire an education with reference to success at his real work in life, yet the notion of school training which leaves out of view the elevation of character along with the development of the mind, and thinks only how knowledge may be coined into cash, is a sordid and degrading notion. It will be a sad day for this republic, it will be the beginning of the end prophesied by its earliest enemies and by the enemies of human freedom and progress everywhere, when the words of the poet may be truly said of our nation—

“ Plain living and high thinking are no more.
The homely beauty of the good old cause
Is gone; our peace, our fearful innocence,
And pure religion breathing household laws.”

It is well, of course, to consider how to best infiltrate grammar and geography into the adolescent mind, and how best to succeed in making arithmetic penetrate the obdurate skull without a surgical operation, but may you not also properly consider how grammar and arithmetic and geography once in may serve as a means of grace to their possessor? Whether you are imparting "the higher education" or whether it is a curriculum limited to the three R's, I pray you along with it try to provide for the transfer of the obedience, respect, and order of the school to the after life of the pupil as a citizen, so that with his fellows he may stand as a wall of adamant against anarchy, communism, and riot on the one hand, and the unjust aggressions of money on the other, vindicating in his life and conduct the supremacy of the law, without which nothing can ensure the peace and perpetuity of this republic.

Ladies and gentlemen of the National Educational Association, I bid you heartily welcome to Topeka and to the State, and trust that your deliberations will be fruitful of great good to the rising generation and generations of Americans yet to rise, and that the Giver of all Good may bless and fructify your work to the healing and saving of the nation.

ADDRESS BY PROF. WILLIAMS.

Prof. P. J. Williams, of the State University of Kansas, in behalf of the Teachers of the State, welcomed the visitors as follows:—

Mr. President and Fellow Teachers :

It is my pleasant privilege on behalf of the teachers of Kansas, to welcome you, and I assure you in the first place we propose to give you a *warm* welcome.

There are two factors that enter into this problem of salutation. The one factor is, whom do we welcome? The other is, are we in a condition to welcome them? Let us speak very briefly of each. And who are these, our guests? They have come from all parts of our

broad land. Whom do we see before us this evening? Not governors, not statesmen, not law makers, not physicians, not farmers, not Knights of Labor, but we see the trainers of thousands of good men and women. We see also those that make our homes. And if we could select an audience to welcome, above all others we would choose you.

Ladies and gentlemen, we welcome you here to-night because there is a battle to be fought. There is a victory to be won. An infinitely greater battle than that of Gettysburg, of the Wilderness, of Yorktown, or of Waterloo.

We have our convictions that the great battle to which I refer is to be fought here in the West; and we want to have a council of war, and you are the men and women whose counsel we want in the great exigency.

Look at our history. It has been a history of earnest contention, and it is to be one to the end. There was a great prophet in the East—one of the greatest scholars America has ever produced. This man said fifty years ago, with the spirit of prophesy upon him, "The great battle of the world is to be fought, not among the 350 millions of China, not among the 250 millions of India; it is not to be fought in the States of the Danube, in the Italian States, in the German States, in the New England States, or in any of the great Middle States, but the battle of the world is to be fought West of the Mississippi River." We believe in prophets here, and hence we believe that this great battle is to be fought here on our plains.

This battle is to be fought here because the world is here. Asia is here, Europe is here, and the States of America are here. It is here in the West where the soldiers for this war are to be prepared. They are to be prepared in every schoolhouse on our great plains. The speaker that preceded me spoke very truthfully about the foes we have to meet. He spoke about socialism, he spoke about nihilism, and he spoke about absolutism. These are our foes, and we are to meet them here. We want your advice; we want you in great earnestness to tell these teachers of our State how to prepare young men and young women for citizenship. The problem before you is, how can a great nation continue to become greater and greater and mount higher and higher as the ages move along, and not reproduce the terrible histories of the old world.

GOVERNOR MARTIN:—The President of your Association, ladies and gentlemen, needs no introduction to you. He will respond to the address of welcome. I have the pleasure of presenting Professor Calkins, of New York.

RESPONSE TO THE ADDRESSES OF WELCOME

BY PRESIDENT N. A. CALKINS.

To His Excellency, the Governor of Kansas: I thank you for the honor which your presence and your words of greeting have conferred upon the Association of educators now assembled at the capitol of this State.

To the Hon. W. H. Rossington, who, in behalf of the State of Kansas, and of the city of Topeka, has extended the welcome of each to the National Educational Association, and

To Prof. P. J. Williams, who, in behalf of the teachers of Kansas, has welcomed their fellow-laborers from all other states with fraternal greetings on this occasion, I thank you.

I thank you in behalf of the National Educational Association for the hearty welcome which each of you has extended to us to-night. In behalf of those who have come hither from the New England and the other Atlantic states, and of those from the sunny South, and of those from the states of the great lakes and of the great plains,—in behalf of all those who have heard your earnest words of welcome, I thank you, and I thank those whom you represent, and assure you, each and all, that we cordially accept your welcome.

We are assembled to-night to open the twenty-fifth meeting of the National Educational Association. The existence of this organization began on the banks of the Delaware, in the City of Brotherly love. Its earlier years have been passed east of the Mississippi River, only twice coming to its banks,—at St. Louis in 1871, at Minneapolis in 1875. To-day, for the first time in the history of the Association, having passed the broad valley of the Mississippi and crossed the Missouri River, it meets in the capital of this great state of the plains, near the geographical center of the Union, in the Garden City of the West, where the citizens and the soil have risen up to welcome us.

We, who have come hither from the shores of the Atlantic, and from the cities and towns and hamlets all along the way to the Father of Waters, bring educational greetings from elder brothers and sisters to

the sons and daughters of this State of the plains; and we also extend our greeting to those who have come out to meet us from other regions of the great West, and, taking the brotherly hands which have been extended to us, we accept the welcome which has been so bountifully tendered, and indulge the hope that in sharing the hospitality of your homes we shall long mutually remember with pleasure the occasion that brought us into personal acquaintance.

As we came along our way hither we saw that you of the West have already builded the public school and the meeting-house,—worthy memorials of your ancestors,—and that you have also reared those temples of higher learning for the youth of the land, which are sending forth strong men and women to fight the battles necessary to overcome the common enemies of our country—ignorance and vice. We rejoice in what you have already done, and hope that our coming here may cheer you onward in your noble work.

Again thanking you for your welcome, I will take the liberty of introducing one who acted as the secretary of the meeting at which this Association was organized, and who has served it in the same capacity during many years. I now have the pleasure of introducing to you W. E. Sheldon, of Boston, the Secretary of the Association.

RESPONSE BY SECRETARY SHELDON.

Mr. President, Ladies, and Gentlemen:

This is a proud hour; an hour in which I feel great self-congratulation. As the "errand boy" of this Association, as the humble lieutenant of a veteran educator, and as a member of the Executive Committee of this Association, I came West last November to spy out the land, and see where, on this continent, was the best place to hold the meeting of the National Educational Association. I traveled until I crossed the Father of Waters, and came over the broad plains to the capital of Kansas—the city of Topeka. I shall never forget the greeting, the hospitality, and the cordiality of the people of the city of Topeka. I thought them a warm-hearted, generous people, (but it has

been warmer since I came here the second time than it was the first). I then made up my mind that it would be a good thing if all the educational friends in the East and in the North and in the South and in the far West could see the plains of Kansas, and reported that this was a land "flowing with milk and honey." Very many years ago an eminent journalist said to the young men of the East, "Go West," and many of them went, settling first near one frontier line and then near another frontier line, until I believe now, your Excellency, there is no such a thing as frontier lines in this country.

On my first visit I saw here a body of young men who seemed to me to look lonesome. I went back to the East and told my friends of the lonesome looking young men out on the prairies of the West, and that they said, "Where are the fair daughters of the East?" As an officer of the National Educational Association I have the honor of presenting them to you to-night; and do you wonder that I am proud of the occasion? I know they come with high aims and noble educational purposes and with pure motives; but I have a sort of an intuition that some of them would not object to staying here if properly invited to do so.

If by chance, the officers of the Association should be instrumental in bringing to your borders now and then a "crank," do not be frightened, for I remember that in the early history of Kansas there were hosts of very conservative men in the city where I resided, who said, "Those fellows are all cranks out there." Many are here who are in sympathy with your determination, with your individuality, with your originality, with your intenseness of purpose, and with your determination to promote the general intelligence of mankind. You came here bringing the implements of agriculture, but you came also prepared to plant the schoolhouse by the side of the church. The fact is, the elements of educational power entered into the problem of freedom on this soil, and you recognized that power. We must foster universal education to secure the high order of citizenship which will recognize patriotism, obedience to law, and a recognition of those great principles that make the nation strong and enduring.

Mr. President, as I said, I am the "boy" of the Association, a humble worker in the cause, and not a speaker for such an occasion. The veterans are to follow me.

THE PRESIDENT:—We have with us to-night another of the earlier workers in this Association; one who was elected President at its organization, and who presided at the first regular meeting held in Cincinnati in 1858, and who has since filled the offices of Treasurer and of Secretary. When I inform you that a few days ago he sent me a note as he was passing through the city of New York to attend a reunion of a New England College class in which he graduated fifty years ago, and when I add that he is a regular attendant of these annual meetings, that he came here from the capital of our nation, I need not assure you that he is one of the many teachers who are steadfast friends of this Association. I have the pleasure of introducing to you Zalmon Richards of Washington, D. C.

ADDRESS OF ZALMON RICHARDS.

Mr. President and Friends of the National Educational Association :

Do not be alarmed, did you notice your President said, "fifty years ago?" That is a long time I know. I do not know but that you will think an old man ought to step aside and let Young America come forward, but when the "boy," our Secretary who has just addressed you, was speaking, I remembered that he commenced work in this Association just about the same time that I did. I do not know how many scores of years have gone over his head. I know that a score and a half of them have gone over since I became acquainted with him, and he was an old teacher at that time. It is true I had something to do with the organization of this Association. One man said to me to-day, and congratulated me upon being the grandfather of the "National Teachers' Association." My friends, we have no grandfather; we never had. We have had some fathers. My friend, Dr. Hagar, I think has the right to claim the paternity, if any living man has it; but he and my friend Sheldon and another friend, Pickard of Iowa, thought best, with some others, to choose me as the chief nurse of the Association,—to take care of this infant. At that time it was an infant. Why, when we held that first National meeting at Cincinnati there were only five of us present. I do not suppose there were many that knew anything about it. My friend Sheldon was seated off there, and another good friend in that corner, and another good friend here, so as to make it appear that we had at that first meeting a collection of teachers. We increased our number to about 175, during that session.

What were the aims of this Association when we started out in this work? The grand and one of the most important aims we had in view was to create a union of feeling among all teachers in the United States; we felt that it was necessary that the teachers of the whole country should be brought together. We started out with that purpose, and I think we have accomplished it to a very great extent, for here to-night in this gathering, we have teachers from almost every state of the Union; and I can say that this feeling of unity and good will has been increasing until it has grown into a grand brotherhood and sisterhood of teachers in this country such as we have never had before, and it is going to be stronger still. Another aim that we had was that there should be such a thing recognized in this country as a teachers' profession. Then we started out with another aim: we wanted to have teachers trained for their profession. We sought to have organized in every section of our country, institutions to train teachers—Normal schools, which were hardly known in those days. Normal schools in every part of the country, in every state, in every city, for the training of teachers for our public schools, for our high schools, and for our colleges.

THE PRESIDENT:—We have heard something about the importance of *training teachers* and of *Normal Schools*. I will now introduce to you the principal of one of the oldest and best Normal Schools in this country, Prof. A. G. Boyden, of Bridgewater, Massachusetts.

ADDRESS OF PROFESSOR BOYDEN.

Mr. President, Ladies and Gentlemen:

His Excellency, Governor Martin, said this evening, that in coming to Kansas we should have one grand object lesson. That we have surely had in coming over the plains from the East and seeing the rapid development of our country. But there is a grander object lesson even than that of the development of the material resources of this country, and that I think I see before me here to-night in this

gathering of teachers and citizens and friends of education. We do indeed well to come from the East and from the North and from the South and from the West into this center of our country to see what the length and breadth of extent our country is in all its resources. I think the grandest of all resources is in the men and women scattered over these broad acres, who are making homes for themselves and building institutions of Government on the strong and firm foundation of morality, intelligence, and virtue. And when we come over this grand land of ours and see the church and the schoolhouse everywhere, and see the teachers training the young, and see the homes springing up, it is to me one of the most cheering, encouraging sights that can come to any man. I have been accustomed in the East to think of Boston as the "hub." When I reached Topeka I was told that Boston could no longer claim that prominence. Then I began to make some inquiries, and I found that Boston men were here, that Boston capital was here building railroads, and the institutions of the country. I found that a large number of New England citizens were here, and I began to feel that really the "hub" had extended into Kansas. Every one of the schoolhouses gracing our land is a center of power and influence that cannot be estimated. And every teacher ruling in these little kingdoms is doing a work whose influence for good cannot be measured. I trust that we shall go back to our work better fitted than ever before to accomplish all the good that is within our power to accomplish in the schoolroom, in the training of teachers and of children to become honorable men and women.

PRESIDENT CALKINS:—We have evidence to-night that those who have come hither from various parts of the country are being remembered by the loved ones whom they left behind. The Secretary will announce the arrival of numerous telegrams.

After these announcements the session closed with music by the Modoc Singing Club of Topeka.

*ADDRESS BY N. A. CALKINS.**

PRESIDENT OF THE NATIONAL EDUCATIONAL ASSOCIATION.

More than a quarter of a century has passed since a meeting of educators was held in the city of Philadelphia, to organize a National Association of Teachers. Ten states were represented there, and thirty-eight members were enrolled. That meeting was chiefly occupied with matters pertaining to the organization of an educational association which has now convened west of the Missouri, to hold its twenty-fifth meeting.

The periods of growth of this Association are marked by a few changes. Although organized to meet biennially, the first regular meeting proved to be so attractive that the plan for holding annual meetings was then agreed upon. The multitude of subjects to be considered, and the desire of those engaged in similar educational work to have a better opportunity for discussing special topics more exhaustively, subsequently led to the formation of a National Association of Superintendents, also of an American Normal Association. In 1870 these three National Associations were united, and the entire organization was divided into sections, two or three of which met on the same day. These sections were the Departments of School Superintendence, of Normal Schools, of Elementary Schools, and of Higher Instruction. Provision was also made whereby other departments might subsequently be formed. At this meeting the name was changed from that of National Teachers' Association to that of National Educational Association.

The plan of union and evolution having been accepted, the process of differentiation has gone forward, and to-day this Association has no less than eight departments. One of these—the National Council of Education—was evolved at the meeting held at Chautauqua in 1880. It is composed of sixty members, of whom ten are elected each year—

* Before the General Association, Wednesday morning, July 14, 1886.

five by the Board of Directors of the Association, and five by the Council. The Council differs from the other Departments in many of its characteristics ; and it may appear, from the nature and variety of the subjects considered by it, to be occupied in gathering up the topics that led to this evolution in the Association, with the purpose of a further and deeper consideration of them. In the treatment of subjects by the Council, the united criticism, experience, and judgment of several members are brought to bear upon the papers submitted, so that in their final publication they fairly represent the views of the members present, and make this Department most valuable for its elevating influence upon educational thought and action.

In the plan of the meetings for the present year, the purpose has been for the General Association to consider educational matters of a broad and national character, and to furnish more favorable opportunity for full discussion than has been usual heretofore, while in the arrangement of the exercises for the several Department meetings special attention has been given to schoolroom work. I trust that those teachers who attend these special meetings will be able to see and hear much that may be of practical use in their own schoolrooms.

Fortunately the treasury of the Association was relieved from its burden of debt at the close of 1883 ; and from the receipts during 1884 the sum of \$3,000 was set aside as a permanent fund, the interest of which only may be used toward payment for the publication of the Volume of Proceedings. An addition of four hundred dollars to the permanent fund has already been secured this year, by payments of four Life-Directorships, and it is hoped that much larger additions may be made from the receipts for other memberships at the present meeting.

This Association was formed as a voluntary organization, without a legal incorporation. Steps have been taken at two or three of its meetings toward procuring corporate powers ; and to this end a bill was introduced into Congress in February, 1880, for its incorporation. This bill passed the Senate, was considered in the House, and finally referred to the Committee on Judiciary near the close of the session, and there it slumbered. At the last meeting of the Association, held at Saratoga Springs in 1885, a committee of three was appointed to secure articles of incorporation for the National Educational Association

under the United States laws. In compliance with the resolution appointing said committee, corporate powers were obtained last February, under the statutes of the District of Columbia; and it now only remains for the Association to take final action thereon — make the necessary amendments to its Constitution—to become fully possessed of corporate powers under the laws of the United States.

In this connection allow me to call your attention to the importance and urgent necessity of making provision in the amended Constitution for securing greater permanency of membership, for the better preservation of our records in the hands of some more permanent officer, and for a proper custody of such volumes and other property as the Association now has, and of whatever may come into its possession. One of the best friends of this Association, one who has done more than any one else for the preservation of our back volumes, is the Commissioner of Education at Washington, the Hon. John Eaton; and to his kind offices in its behalf during many years its members owe a debt of gratitude.

Standing to-day far removed from the place and time of the formation of this National Association for the consideration of matters pertaining to education in our land, it seems fit that we should glance at a few of the material changes that have been brought about through the growth of our country, that we may comprehend the present demands upon educators. Observing the material progress of the United States, we find to-day that it has an area of more than three hundred millions of acres under improvement, that these acres are grouped in four and a half millions of farms, and occupied by nearly eight millions of farmers, about six millions of whom cultivate their own soil. Nearly four millions of people are employed in manufactures and in mining; and eight millions in other occupations, service, professions, etc., in the United States. In productions of agriculture, manufactures, and mining, our country exceeds every nation in the world. Our farms are extending by the hundred thousand annually; our productions of all kinds are rapidly increasing in amount; our farmers, manufacturers, miners, artisans, artists, and professional workers are constantly multiplying. The railway systems which now traverse the country in all directions, binding it together with bonds of steel one hundred and thirty thousand miles in length, are extending thousands of miles yearly. Its seven hundred and sixty thousand

miles of telegraph lines would put thirty girdles round the earth. The facilities for communication supplied by these two systems keep our sons and daughters from the East who seek their homes on the prairie, the plain, or among the mountains of the far West, still within the influence of home. From one of the eight thousand newspapers published in this country each may read the same daily news.

Hundreds of thousands, born in other countries, ignorant of our institutions, and speaking different languages, are seeking homes in our midst and their children and our children are growing up together and will become the future citizens of this broad land. It is the glory of our American system of public education that it is a crucible in which the children of Ireland, Germany, Sweden, and of all other nations, may be fused into an English-speaking, American race. It is the greatest power for the upbuilding and the preservation of our free institutions. When properly taught the spirit and true freedom of his adopted home, the foreigner and his children become devoted to the Republic.

Systems of public education exist in every state and territory of the Union. In twenty-eight states there are ninety-eight normal schools for training teachers, that the public schools may become still more efficient. To provide a permanent fund for the support of the schools in twenty-seven states, the United States government has set apart about one twelfth of the public land in each township, the income of which shall be used exclusively for educational purposes. Sixty-eight millions of acres have been thus given to twenty-seven states. Additional grants of land were made for State Universities, Agricultural and Mechanical Art Schools, in all at least ten thousand acres more; making a total of seventy-eight thousand acres which the general government has thus appropriated. This area of land given for educational purposes is greater than the whole of England, Ireland, and Scotland combined.

Furthermore, the amount of money spent for war, in the army and navy, is from two to twelve times greater in each of the European countries, than is the sum spent for education in those countries; while in the United States the amount spent for education is twice as much as that spent for the army and navy. My native state, New York, with but a limited school fund, spends eleven millions of dollars annually for the maintenance of her free public schools. The city of New York, for the support of her two colleges — one for girls and one

for boys — for her two hundred free schools, in the supply of books, maps, charts, slates, pencils, and stationery to all the pupils, and for the salaries of her three thousand two hundred teachers, to educate her two hundred thousand children, for all these, the city of New York spends over four millions of dollars annually.

When we consider the liberal provision made for education in the states of the West, through their permanent school funds, and behold the commodious schoolhouses, often the most imposing buildings that greet the traveler from the shores of the Great Lakes to the Pacific coast, inviting all the children of these regions to enter and prepare for the duties of life, we can but rejoice in these conservers of our institutions — these bulwarks of our liberties — which you of the West have raised. These works do honor to yourselves and add glory to our common country.

These states west of the Mississippi occupy the *unknown regions* of the geographies of our school days. The trials of the pioneers, the slow progress of the wagon trains, the solitude of the home on the treeless prairie, of twenty-five years ago, are now scenes of the past. The public school, the church, the railroads, the telegraph, the telephone, the electric button — these facilities for transportation and communication have changed it all. *In view of these material changes in our country*, in labor-saving machinery, in mechanical arts, and new industries, in modes of travel and of communication, and of the unparalleled increase of citizenship, *what new duties are laid upon the educators? what are our educational needs for the future?*

Our great need is a public education that shall mould into harmonious union with our institutions all peoples who come to dwell in our midst. It is not intellectual development alone that we need, but a moral training that shall make men more manly and more upright in their lives. We need an education that shall develop good character, firmness of principle, and the courage to do that which is right and wise to be done. Then it is our duty, fellow teachers, to do all in our power to make the schools of every state and territory more and more efficient each year, in whatever will prepare the children of our land to become intelligent, wise, and useful citizens. Let the instruction which we give, the manner of our teaching, the modes of our school management, be such as to develop good character and broad intelligence.

Turning to the consideration of those matters which pertain more

directly to the teachers' province in education, we cannot overlook changes in educational thought and work. Painstaking, earnest, faithful teachers have been among the instructors of youth since the days when Plato led his pupils in classic groves. The work of these teachers of the past deserves honor. Some of the foundation stones laid by them, in the great educational structure, were irregular in form, and but partially fitted in their places; but as succeeding laborers, with more skill in the art of teaching, came on, symmetry began to appear, and this temple is rising into stately forms and symmetrical proportions, far above the ideals of the earlier builders. No single individual has wrought these great changes; no one man deserves the credit for them; the thought and labor of many have led towards these results. Every thoughtful teacher, every observing educator, has contributed to the onward movement. Tact employed in teaching, and wisdom exercised in supervision, efforts to learn the modes of child development; to know the training that guides in ways of intelligence and the formation of noble characters; all these contribute to the progressive changes in educational systems and results. To have been, to be *now*, one of the workers in the upbuilding of our country's noblest structure—her system of public education—is a great honor.

When books and the learning taught in the schools had been long divorced from the affairs of practical life, Bacon sounded the key-note for change and progress when he proclaimed: "Men read in books what authors say concerning stones, plants, animals, and the like; but to inspect these stones, plants, and animals with their own eyes is far from their thoughts. It is no less true in this human kingdom of knowledge than in God's kingdom of Heaven, that no man shall enter into it except he first become as a child. Go to nature and listen to her many voices, consider her ways and learn her doings; so shall you bend her to your will, for knowledge is power."

The present extent of investigations in the various subjects of science and art, the rapidly-succeeding discoveries in the several fields of natural history, the amount of attention now bestowed upon each of these in the public press, and their intimate relations to the various occupations of life, render it absolutely necessary that our standard of education for to-day should be correspondingly deepened and broadened. The present demand in education does not consist so much in the call for a mastery of many new subjects, as it does for a more complete development of mental powers and the formation of those habits of

investigation and research which mark the wide difference between those whose memories have become chiefly store-houses for what other people say or write, and those who have been taught to *observe*, to *think*, and to *describe*, and who have learned *where* and *how* to obtain whatever knowledge may be desired.

The days that may be spent in school going are too few, life itself is too brief, and the subjects embraced in the several departments of useful knowledge at the present day are too numerous to render it possible for each person to hope for a mastery of all ; but such a development of the powers of acquiring knowledge as will secure the ability to obtain whatever may be needed from any department is not too much to hope for, nor more than can be successfully attained by proper methods in education. Correct habits of thought, of study, of investigation, the power to gain knowledge from every surrounding object, together with the ability to apply knowledge profitably to the affairs of life, constitute the standard of education for to-day. The two indispensable qualifications needed by teachers, to insure their success to-day, are *knowing*, and *knowing how to do*. The *knowing* is a high attainment for which all should strive ; the *knowing how to do* is a high art that becomes a permanent guarantee for the use of successful methods in teaching, and for the accomplishment of the most valuable results in educational training. Obtain these two great qualifications for successful teaching, and develop them in your pupils, that they may possess rich stores of knowledge and the ability to use them skillfully.

We stand here, within the bounds of one of the states latest admitted into the Union, in the presence of representatives from the oldest and from the youngest states, and before those whose territories are earnestly asking for admission to the great sisterhood ; and one of the important questions that comes vividly into the foreground is : *What shall education do for the future of the country ?* Ponder this question seriously ; act wisely under your decision.

We who come from the eastern portals of the land, through which crowd ceaseless throngs from foreign countries to seek homes on these broad plains, feel that the educators in these western states have a great work laid upon them—that of *Americanizing the foreigner*, so that he cannot foreignize our institutions. Broad and deep must be laid the foundations of the American public school in every town, village, and city of the land, in order to assimilate and develop into intelligent citizenship those who have no true knowledge of free institutions.

Teachers of the West, this is one of your high duties. As you prize your rich inheritance of free institutions, as you desire the prosperity of your country, as you cherish your homes, honor them all and bless yourselves in carrying forward to triumphant success the great work of education before you. And may the God of our fathers, who has crowned us so abundantly in the past, bless and guide you.

SCIENTIFIC TEMPERANCE INSTRUCTION IN THE PUBLIC SCHOOLS.

BY MRS. J. ELLEN FOSTER OF CLINTON, IOWA.

In no previous age has there been such a liberal expenditure for popular education as in our own. The school property of the United States has cost \$200,000,000, and we pay over \$100,000,000 a year for teachers. England, France, Belgium, Germany, show a like outlay, while elsewhere, in America and Europe, the efforts in the same direction are only in a less degree. In extent and energy, the movement for popular education at the present day dwarfs those of all preceding times. So says an authority of unchallenged reliability, in a current publication; but even while the philanthropic heart swells with these potentialities, there stalks before us a procession of lame and halt and blind; we see the stare of the idiot, the leer of the imbecile, and hear the shriek of the maniac; for the same authority further reveals his findings out. "The increase of insanity during the present century has been steady, large, and universal in the civilized world, and has been exactly proportional to the growth of what we have called our civilization."

In 1850, the ratio of the insane in our population was one to 1,486; in 1860, it was one to 1,306; in 1870, it was one to 1,030; and in 1880, it was one to 549. In 1850, the ratio of idiotic persons among us was one to 1,469; in 1880, it was one to 656. In 1850, one out of every 2,365 of our population was a deaf-mute; in 1880, the proportion was one out of 1,197. Thirty years ago, our census reported one out of 2,367 as blind, while our last census reports one out of 1,033. Why set these figures* the one over against the other? That every friend of the race may see what are the alarming tendencies, what are the threatening dangers, with which our educational systems have to cope. Is it

* Probably the actual increase, though great, is not so large as the above figures would seem to indicate. The later statistics are doubtless more correct than those of thirty years ago; and, moreover, the real increase is more in the foreign population, transferred to our shores, than among our native inhabitants. We also venture the inquiry whether the term idiocy does not now include imbeciles, etc., not reckoned as idiots thirty years ago.

as true now as two thousand years ago, that "our people perish for lack of knowledge"? Thus queries the educator of to-day. He is not a recluse from life's activities; not a cloistered book-worm, dwelling always among the mists of history, the vapors of philosophy, the abstractions of mathematics, the mysteries of tongues, or the wonders of physics. He is "a man of affairs"; she is "a woman of views." They enter the activities, the charities, the philanthropies, the economies of the living, rushing present. They are not flippant nor arrogant; they have zeal with knowledge, courage with patience.

The development of the nation's material resources, the practical application of scientific methods to the every-day needs of the common people, the ever-increasing and complex questions of social economy and political life,—these each demand a place in current curriculums, and find varied expression in educational subjects and methods. To the three R's of our fathers are added such liberal acquirements as shall fit the child for citizenship in this best government the sun shines on. Lest any need be forgotten, or any refinement of our civilization neglected, physical, industrial, and military training, schools of technology and applied science, with music and art, are added.

And now, to the heart of the home comes the answered plea for scientific temperance instruction in all schools supported by public money or under state control. This last departure is in the same upward trend of educational effort which gives us the improved, comprehensive, and beautiful textbooks in the hands of our children, rather than the primer and the Murray our grandmothers used; and the modern schoolhouse, with appliances for health, comfort, and elegance, in contrast with the log-cabin and rude benches which constituted the training-school for "shooting ideas" a half century ago. This touch of the people's life has been felt on the door of the school-room and at the desk of the teacher.

DRINK HABITS.

A history of the drink habits of the race shows them to be almost co-extensive with the entire period of its existence, more or less ample in detail, as the text is full or meager. It is a record of misapplying the fruit of the ground; misdirecting man's ingenuity,—wasting his vital force; disturbing social relationships; destroying national life. The

"head lines" of the tale read misapplication, misdirection, waste, disturbance, sorrow, destruction, death. Race habits, climatic conditions, legislative theories, and governmental administration modify the details of this tragedy, but its foundations are ever the same,—the use and the abuse of alcoholic liquors and narcotics.

Mythology, tradition, inscription, and song represent the votaries of Bacchus chanting their unholy lays before a divinity who mocks his subjects and outrages his courtiers. Thousands of years ago the Bible said, "Wine is a mocker"; and history and science unite in declaring Alcohol to be a deceiver everywhere, betraying his victims with the kiss of sensual delight. Though known from prehistoric times, nevertheless alcoholic fermentation was not well understood. Alcohol, when discovered by distillation from wine, was christened *aqua vitæ*,—water of life; the science of our day condemns it as the water of death. Here, as always, science is the laggard, where religion and philanthropy have been the pioneers. Political economy was fully abreast of scientific data, for the legislation of Christendom condemned the traffic in intoxicating liquors long before science had declared the essential principle of those liquors to be an *irritant poison*.

REFORM INCEPTED.

The human mind approaches abstract truth in physics and philosophy through the underbrush of expediency; this scientific truth was reached by the same circuitous route. Rev. Daniel Dorchester, D. D., of Massachusetts, the eminent statistician of religious progress and of the temperance reform in this century, writes of the inception of this reform. "It has generally been the case that many bold, struggling, isolated efforts of individual minds have characterized the earlier stages of great reforms, until some single soul, towering above all the rest, drew the forces into a solid, advancing column, and led the way to victory. Dr. Benjamin Rush very largely answers this description, though death overtook him just as the movement became effectively and permanently organized. His antecedents indicate that he was a fit man for such a work. It is said that when a member of the Provincial Assembly of Pennsylvania, in 1774, he moved the first resolution in favor of our national independence; and that on the 23d of June, 1776, while a member of the Continental Congress, he was appointed chairman of the Committee on Independence." His unchal-

lenged position among the scientists of the medical profession is attested by the institutions which bear his name, and the wide-spread acceptance of his teachings.

In the year 1785, Dr. Rush published the first edition of his celebrated essay on "The Effects of Ardent Spirits on the Human Mind and Body." This essay, a small pamphlet, was a potential factor in the history of this reform. The next year it was republished in England in the *Gentlemen's Magazine*, and also in the *Gazette*, a Philadelphia newspaper. It was again republished in 1789, and many editions later were issued, under his personal supervision, as late as 1811. It also appeared in several editions of Dr. Rush's works. "It was read by tens of thousands of people, and was the great and only temperance document of that early period. It exerted a potent influence as the testimony of one who confessedly stood at the head of the medical profession of his day."

From this essay we chronicle the formal inception of the temperance reformation of this century. This reformation has determined the scientific standing of alcoholic drinks. It has extensively remodeled social drinking customs, so that alcoholic beverages are now banished from the best American society. It has given to the world correlated statistics from eminent sociologists and political economists, showing the relation of drink habits to pauperism, crime, idiocy, and insanity. It is rapidly and radically revolutionizing legislative theories and enactments in relation to the drink traffic. And last, and best of all, it is incorporating into the educational system of the country the verdict of science against the deceiver of mankind.

"Verily the heart of the fathers is turned toward the children, and a little child shall lead them."

LAW OF GROWTH.

In the study of this subject we are reminded anew of God's law in the natural and spiritual world: "First the blade, then the ear, after that the *full corn* in the ear." People often say, as they speak of the recent movement for the enactment of Scientific Temperance Instruction Laws, "Well, now, that is a sensible work; now, that is beginning right." As they rejoice over "the full corn in the ear," they little realize what a history could be written of the unnoticed toils of those who first sowed the seeds of the now rich, maturing harvest which gladdens our eyes; of the prayers and efforts that bedewed the sprout-

ing "blade," and watched the forming "ear." Thus, in due time, under the refreshing rains sent by Providence, and the invigorating sunshine of God's Spirit, the cheering harvest and the divinely appointed harvesters are brought together.

A prominent cause of intemperance has always been the lack of accurate scientific temperance information generally diffused among the people. Following the pioneer essay by Dr. Rush, as early as from 1830 to 1836, Dr. Justin Edwards, in his annual reports as Corresponding Secretary of the American Society for the Promotion of Temperance, produced numerous carefully collected facts and weighty discussions of the nature and effects of alcohol upon the human system, by himself, and also by such eminent physicians as Drs. Reuben D. Muzzey, S. Evelyn, Thomas Sewell, John C. Warren, etc. Those reports were published in a respectable octavo, under the name, "Permanent Temperance Documents," for the wide dissemination of these valuable truths among the people.

The earliest recorded effort to utilize the public schools in this direction was in a large children's temperance meeting held in the Odeon, in Boston, February, 1837. The officers of six temperance societies petitioned the Mayor and School Committee of Boston for a recess of the public grammar schools, to enable the pupils and teachers to attend this meeting. The petition was granted, and about 2,500 children were present. To every teacher was given a volume of the Permanent Temperance Documents, and to each of the children one or more temperance tracts. At a later date, 800 of these Temperance Documents were placed in the public-school libraries of New York, and 500 of them in Ohio school libraries.

MISS COLMAN.

In 1869, Miss Julia Colman, a well-known, able writer of essays upon scientific and temperance subjects, was invited to address a teachers' institute in Fulton County, N. Y., upon the importance of teaching physiology. At that early day she presented the great need of teaching scientific temperance truth in connection with physiology. Doubtless Miss Colman's varied efforts as a writer of temperance stories for children and a worker in Bands of Hope, quickened her perception of the importance of this method of inculcating temperance principles among the children. In the winter of 1870 and '71, in a series of lecture engagements in the state of Maine, she introduced

this thought very prominently into her lectures, although she fully realized that such instruction could not be made immediately practicable, because there were at that time no suitable textbooks. Nor could authors be led to write, or publishers to publish them, until there was a demand for them among those interested in the children and the schools. In the address of the Hon. Joshua Nye, at the Annual Temperance Convention of Maine, at Augusta, January, 1871, it was Miss Colman's pleasure to hear the views presented by her in lectures, to which Hon. Mr. Nye had listened, publicly approved. Mr. Nye said "he would like to see the *facts* about the nature and effects of alcohol more fully taught; yes, he would like to see them taught in the public school." All through the year of 1872, Miss Colman was engaged in writing the Catechism on Alcohol, for the *Youth's Temperance Banner*. This was at that time a laborious work, requiring much study and research. It was soon published in the form of a small pamphlet or tract. It was not designed as a textbook for public schools; yet the more than 200,000 of those catechisms that have been sold have doubtless done a great work in preparing teachers and people for the more recent wondrously successful efforts to secure compulsory scientific temperance instruction in the public schools.

NATIONAL TEMPERANCE SOCIETY.

The *National Temperance Society* at its Seventh Convention in 1873, passed the following resolution:—

That inasmuch as education is essential to the removal of the prevailing ignorance of the nature and effects of intoxicating liquors, the National Temperance Society is hereby respectfully requested to issue a work on physiology that will show the origin and nature of alcohol, and its effects upon the human system, for the use of schools, and we urge its introduction into public and private schools.

In 1874 came the Woman's Temperance Crusade. The sorrows of civil war had spent their force; broad prairies and rich mines invited adventurers, and commerce and industry beckoned to the multitudes in over crowded Europe. There came to our shores peoples of all races and conditions; they brought all habits, all customs, all discontents, all vices. Drinking-habits, and the usual concomitants, with consequent moral degradation, found a soil only too well prepared, and rapid growth of evil followed,—the legitimate fruitage of the demoralized condition of society after the great war.

W. C. T. U.

A new empire, a new oligarchy, mightier than that of African Slavery, so lately overthrown, had arisen under the flag. The Crusade was a great uprising of American Womanhood, a protest of American homes against the Saloon Oligarchy. It crystallized in the organization of the Woman's Christian Temperance Union, which early instituted far-reaching plans for the distribution of temperance literature, and called Julia Colman to superintend, originate, and direct their plans in this phase of the work. She was eminently qualified for this position, by long years' acquaintance with literary and scientific pursuits, and by her connection with the National Temperance Society, organized in 1865, of which Hon. Wm. E. Dodge, of New York, the merchant prince, the Christian philanthropist, the consistent total abstainer, and influential temperance reformer, was the President, until the time of his death, in February, 1883. This society, under the able management of its Corresponding Secretary, J. N. Stearns, had already issued a vast amount of reliable temperance literature, presenting the social, religious, economic, and scientific phases of this alcohol question. Thus, providentially, an arsenal of weapons, a storehouse of ammunition, was already prepared for the army of women to be recruited by the W. C. T. U.,—a living illustration of the words in Psalm lxxviii. 11 (R. V.), "*The Lord giveth the word: the women that publish the tidings are a great host.*"

In 1875, Miss Colman sent her Temperance Catechism, with a copy of Story's "Lectures upon the Nature and Effects of Alcohol," to the editor of the *Indiana School Journal*, asking his co-operation in getting the subject before the Indiana State Teachers' Association; and they passed a resolution recommending temperance as a study in the public schools, which was published in the *Journal*, in September, 1875, accompanied with a short article in relation thereto. In 1878, Miss Colman published the *Juvenile Temperance Manual*,—a book containing essays, incidents, and facts illustrating more fully the lessons of the Catechism. This Manual was introduced into many public schools, and is still very helpful, for the use of teachers, in oral instruction. About this time there was republished in this country the Temperance Lesson Book of Dr. B. W. Richardson, which had been prepared for the express purpose of teaching scientific temperance truth in the public schools of England, and successful efforts were made in some localities to have them introduced into the schools of this country.

Thus, little by little, by varied agencies, was the work of securing compulsory temperance education for the children of this country being prepared, so that it became only a question of time as to *when* it should be done; and when that time came, God raised up the needed special worker.

MRS. MARY H. HUNT.

In the year 1880, the National Woman's Christian Temperance Union, at the suggestion of Mrs. Mary H. Hunt, of Boston, created the "Department of Scientific Temperance Instruction in Schools and Colleges." Mrs. Hunt was elected Superintendent. She had been prominently connected with educational work, Professor of Natural Sciences in one of our colleges, a careful student of the scientific phases of the temperance question. She saw, with prophetic eye, that if the children of the whole land can be taught in the public schools that alcohol is a poison, how, and why, the next generation will believe it too. For the terrible evils of intemperance she saw in that belief a remedy, growing more and more powerful, as the army of children thus taught come forth from the schools into the ranks of men and women.

In the first year of her work in this Department of the National Woman's Christian Temperance Union she made one hundred and eighty-two public addresses, in ten different states, including addresses before thirty-one school boards, eighteen colleges, two normal schools, four teachers' conventions (national and state), before Sunday-school assemblies and other deliberative bodies. The year before the school board of her own town, through her instrumentality, had placed temperance textbooks in the regular course of study—the first action of school authorities in this direction on this continent, so far as known. Her appeals for the scientific method of teaching temperance met, almost everywhere, a cordial and enthusiastic response from educators and directors of educational matters. In many localities, through the action of school boards and the co-operation of progressive teachers, temperance textbooks were adopted for use in many schools. At that date the Temperance Catechism, Alcohol and Hygiene, and Dr. Richardson's Lesson Book, were the works used.

In some schools the work was done faithfully, with gratifying results; in others, the enthusiasm, which led to the introduction of textbooks, soon subsided; teachers grew indifferent, lessons were

recited at irregular intervals, and in many cases the books were used only for reference. The teachers claimed that the regular work in the branches required by law took up all the time, and the temperance lessons had to be neglected. The conviction thus grew upon Mrs. Hunt that as no study stays long in the public schools which is not required by law, if the children of the whole land are to learn in the public schools the evil effects of alcoholic drinks, this branch must be placed among the regular studies required by law to be taught to all pupils. Out of this conviction grew the methods of agitation and organization which have accomplished such sweeping and far-reaching results.

The text of these Statutes, in the order of their adoption, is as follows:—

VERMONT.

NOVEMBER, 1882.

[Adopted by a good majority.]

No. 20. AN ACT relating to the study of Physiology and Hygiene in the Public Schools.

It is hereby enacted, etc.:

SECTION 1. Section 558, Chapter 33, of the Revised Laws, is hereby amended so as to read as follows: one or more schools shall be maintained in each town, for the instruction of the young in good behavior, reading, writing, spelling, English grammar, geography, arithmetic, free-hand drawing, history, and constitution of the United States, and elementary physiology and hygiene, which shall give special prominence to the effect of alcoholic drinks, stimulants, and narcotics upon the human system. Text-book committees shall select and recommend a text-book on elementary physiology and hygiene, for use in their respective towns.

SEC. 2. No teacher shall be required to pass an examination in Physiology and Hygiene before November 1, 1883.

Approved Nov. 13, 1882.

The above enactment was the first Statute passed in this country on this subject.

CHAIR. PUB. COM.

MICHIGAN.

MARCH, 1883.

[In the House 68 votes for, and 13 against. In the Senate two adverse votes.]

SECTION 1. *The people of the State of Michigan enact:* That Section 15 of Chapter 3, and Section 4 of Chapter 12, of an act entitled "An act to revise and consolidate the laws relating to public instruction and primary schools, and to repeal all statutes and acts contravening the provisions of this act," being Act No. 164 of Session Laws of 1881, be amended so as to read as follows:

SEC. 15. The district board shall specify the studies to be pursued in the schools of the district: *Provided always*, that provision shall be made for instructing all pupils, in every school, in Physiology and Hygiene, with special reference to the effect of Alcoholic drinks, stimulants, and narcotics generally upon the human system.

SEC. 4. No certificate shall be granted to any person, to teach in the schools of Michigan, who shall not after September 1, 1884, pass a satisfactory examination in Physiology and Hygiene, with special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system.

NEW HAMPSHIRE.

JUNE, 1883.

[*Passed without opposition.*]

AN ACT to amend Sections 4, 5, and 10 of Chapter 89, of the General Laws.
Be it enacted by the Senate and House of Representatives, in General Court convened:

SECTION 1. That Section 4 of Chapter 89 of the General Laws be, and is, so amended as to read as follows:

Teachers of common schools shall be examined in reading, spelling, writing, English grammar, arithmetic, geography, and the elements of history, and in physiology and hygiene, with special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system; and in other branches usually taught in said schools.

SEC. 3. That Section 10 of Chapter 89 of the General Laws be, and is, so amended as to read as follows:

The school committee may prescribe suitable rules and regulations for the attendance, on management, studies, classification, and discipline of the schools, whenever it deems the same necessary: *Provided*, that the Physiology and Hygiene, with special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system, shall be prescribed in all schools sufficiently advanced; and said regulations and rules, being recorded by the town clerk, and a copy thereof given to the teachers and read in the schools, shall be binding upon scholars and teachers.

SEC. 4. This act shall take effect from and after March 1, 1884.

NEW YORK.

WINTER OF 1884.

[*In the House 92 for, and 2 against. Senate 22 voted for it.*]

AN ACT relating to the Study of Physiology and Hygiene in the Public Schools.
The people of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Provision shall be made by the proper local school authorities for instructing all pupils, in all schools supported by public money, or under State control, in Physiology and Hygiene, with special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system.

SEC. 2. No certificate shall be granted any person to teach in the public schools of the State of New York, after the first day of January, eighteen hundred and eighty-five, who has not passed a satisfactory examination in Physiology and Hygiene, with special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system.

RHODE ISLAND.

APRIL 24, 1884.

AN ACT in relation to the giving of Instruction in Physiology and Hygiene in the Public Schools.

The School Committees of the several towns shall make provision for the instruction of the pupils, in all schools supported wholly or in part by public

money, in Physiology and Hygiene, with special reference to the effect of alcoholic liquors, stimulants, and narcotics upon the human system.

ALABAMA.

FEBRUARY, 1885.

AN ACT relating to the Study of Hygiene and Physiology in the Public Schools of this State.

SECTION 1. Be it enacted by the General Assembly of Alabama: That provision shall be made by the Superintendent of Education for instructing all pupils, in all schools and colleges supported in whole or in part by public money, or under State control, in Hygiene and Physiology, with special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system.

SEC. 2. Be it further enacted: That no certificate of first and second grade shall be granted any person, to teach in the public schools of this State, after the 20th day of September, 1885, who has not passed a satisfactory examination in Hygiene and Physiology, with special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system; and it shall be the duty of the State and County Superintendents of Education to see that this law is properly carried into effect.

Approved Feb. 10th, 1885.

KANSAS.

WINTER OF 1885.

AN ACT Concerning Teachers and Studies in Common Schools.

Be it enacted by the Legislature of Kansas:

SECTION 1. No certificate shall be granted to any person, to teach in any of the public schools of this State, after the first day of January, 1886, who has not passed a satisfactory examination in the elements of Physiology and Hygiene, with special reference to the effect of alcohol, stimulants, and narcotics upon the human system; and provision shall be made by the proper officers, committees, and boards, for instructing all pupils, in each public school supported by public money, or under State control, of this State, upon the aforesaid topic.

SEC. 2. This act shall take effect and be in force from and after its publication in the official State paper.

NEBRASKA.

WINTER OF 1885.

Be it enacted by the Legislature of the State of Nebraska:

SECTION 1. Provision shall be made by the proper local school authorities for instructing the pupils in all schools supported by public money, or under state control, in Physiology and Hygiene, with special reference to the effects of alcoholic drinks, and other stimulants and narcotics upon the human system.

SEC. 2. No certificate shall be granted to any person to teach in the public schools of the State of Nebraska, after the first day of January, eighteen hundred and eighty-six, who has not passed a satisfactory examination in Physiology and Hygiene, with special reference to the effects of alcoholic drinks and other stimulants and narcotics upon the human system.

SEC. 3. All acts and parts of acts inconsistent with this act are hereby repealed.

Approved March 5, A. D. 1885.

OREGON.

1885.

[Passed Senate unanimously. House ten votes against.]

SECTION 3. It shall be the duty of the teacher to labor during school hours to advance the pupils in their studies, to create in their minds a desire for knowledge, principle, morality, politeness, cleanliness, and the preservation of physical health; and it is hereby made the duty of every teacher to give, and of every Board of Directors to cause to be given, to all pupils, suitable instruction in Physiology and Hygiene, with special reference to the effect of stimulants and narcotics upon the human system.

NEVADA.

MARCH, 1885.

AN ACT to amend an act entitled "An Act to Provide for the Maintenance and Supervision of the Public Schools," approved March 20, 1885:

Last clause of Section 42: Orthography, reading, writing, arithmetic, the elements of natural Philosophy, and geography shall be taught in all the public schools; and in each school above the grade of primary, there shall also be taught English grammar, history of the United States, chemistry, and elementary physiology and hygiene, which shall give special prominence to the effect of alcoholic drinks, stimulants and narcotics upon the human system; and in such schools as the Board of Trustees may direct, algebra, geometry, drawing, natural history philosophy, astronomy, and the elements of book-keeping, or such of these studies as the Board of Trustees may direct; *Provided*, that the text-books shall not be changed oftener than once in four years.

MAINE.

1885.

AN ACT requiring Scientific Temperance Instruction in the Public Schools.
The people of the State of Maine, represented in Senate and Assembly, do enact as follows:

SECTION 1. Provision shall be made by the proper local school-authorities for instructing all pupils, in all schools supported by public money or under State control, in Physiology and Hygiene, with special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system.

SEC. 2. No certificate shall be granted to any person, to teach in the public schools of the State of Maine, after the first day of January, eighteen hundred and eighty-five, who has not passed a satisfactory examination in Physiology and Hygiene, with special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system.

MISSOURI.

MARCH 24, 1885.

AN ACT to amend Section 7077 of Chapter 150 of the Revised Statutes of Missouri, entitled, "Of Schools," by striking out part thereof, and inserting a provision relating to the study of Physiology and Hygiene, the duties of directors in relation thereto, and prescribing qualifications of teachers:

SECTION 7077. No person shall be granted a certificate to teach in any of the public schools, established under the provisions of this chapter, who is not of good moral character, and qualified to teach orthography, reading, penmanship, arithmetic, English grammar, modern geography, history of the United States and

civil government; *Provided*, that if any patron of any public school in this State demands in writing that instruction in Physiology and Hygiene, with special reference to the effects of alcoholic drinks and stimulants and narcotics generally upon the human system, shall be given in the public schools, of which such person is a patron, then it shall be unlawful for the board of directors, or the board of education of such school district to exclude such instruction from such public school; but such instruction shall only be given to the child or children of such patron or patrons demanding the teaching of the same. *And provided further*, that after the first day of September, A. D. 1886, no certificate shall be granted to any person to teach in the public schools in this State, and no teacher shall therefore be authorized to teach therein, who shall not have passed a satisfactory examination in Physiology and Hygiene with special reference to the effects of alcoholic drinks, stimulants, and narcotics generally upon the human system.

PENNSYLVANIA.

MARCH 31, 1885.

[Unanimously in the Senate; 131 for, 39 against, House.]

AN ACT relating to the Study of Physiology and Hygiene in the Public Schools of the Commonwealth, and Educational Institutions receiving aid from the Commonwealth.

SECTION 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania, in General Assembly met, and it is hereby enacted by the authority of the same: That Physiology and Hygiene—which shall, in each division of the subject so pursued, include special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system—shall be included in the branches of study now required by law to be taught in the common schools, and shall be introduced and studied as a regular branch by all pupils in all departments of the public schools of the Commonwealth, and in all educational institutions supported wholly or in part by money from the Commonwealth.

SEC. 2. It shall be the duty of county, city, borough superintendents, and boards of all educational institutions receiving aid from the Commonwealth, to report to the Superintendent of Public Instruction any failure or neglect on the part of boards of school-directors, boards of school-controllers, boards of education, and boards of all educational institutions receiving aid from the Commonwealth; to make proper provision, in any and all of the schools or districts under their jurisdiction, for instruction in Physiology and Hygiene which, in each division of the subject so pursued, gives special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system, as required by this act; and such failures on the part of directors, controllers, boards of education, and boards of educational institutions receiving money from the Commonwealth, thus reported or otherwise satisfactorily proved, shall be deemed sufficient cause for withholding the warrant for State appropriation of school-money, to which such district or educational institution would otherwise be entitled.

SEC. 3. No certificate shall be granted any person to teach in the public schools of the Commonwealth, or in any of the educational institutions receiving money from the Commonwealth, after the first Monday of June, Anno Domini one thousand eight hundred and eighty-six, who has not passed a satisfactory examination in Physiology and Hygiene, with special reference to the effect of alcoholic drinks, stimulants, and narcotics upon the human system.

SEC. 4. All laws or parts of laws inconsistent with the provisions of this act are hereby repealed.

WISCONSIN.

APRIL, 1885.

AN ACT to amend Section 447 and Section 449 of Chapter 27 of the Revised Statutes entitled "Of common schools."

The people of the State of Wisconsin, represented in Senate and Assembly, do enact as follows:

SECTION 1. Provision shall be made by the proper local school authorities for instructing all pupils, in all schools supported by public money, or under State control, in Physiology and Hygiene, with special reference to the effect of stimulants and narcotics upon the human system.

SEC. 2. The text-books used in giving the foregoing instruction shall receive the joint approval of the State Superintendent of Public Instruction and the State Board of Health.

SEC. 3. No certificate shall be granted to any person, to teach in the public schools of Wisconsin, after the first day of January, 1886, who has not passed a satisfactory examination in Physiology and Hygiene, with special reference to the effect of stimulants and narcotics upon the human system.

SEC. 4. All acts and parts of acts conflicting with the provisions of this act are hereby repealed.

SEC. 5. This act shall take effect and be in force from and after its passage and publication.

Approved April 7, 1885.

MASSACHUSETTS.

JUNE 11, 1885.

AN ACT requiring Physiology and Hygiene to be taught in the Public Schools.

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Physiology and Hygiene, which, in both divisions of the subject, shall include special instruction as to the effect of alcoholic drinks, stimulants, and narcotics on the human system, shall be taught as a regular branch of study, to all pupils in all schools supported wholly or in part by public money, except special schools maintained solely for instruction in particular branches, such as drawing, mechanics, art, and like studies. All acts or parts of acts relating to the qualifications of teachers in the public schools shall apply to the branch of study prescribed in this act.

SEC. 2. All penalties now fixed for neglect to provide instruction in the branches of study now prescribed by law shall apply to the branch of study prescribed in Section 1.

SEC. 3. This act shall take effect on the first day of August, in the year eighteen hundred and eighty-five.

WASHINGTON TERRITORY.

JANUARY, 1886.

AN ACT relating to the study of Physiology and Hygiene in the public schools of Washington Territory and educational institutions receiving aid from the County or Territorial Treasury.

Be it enacted by the Legislative Assembly of the Territory of Washington:

SECTION 1. That Physiology and Hygiene, which shall in each division of the subject so pursued include special reference to the effects of alcoholic drinks, stimulants, and narcotics upon the human system, shall be included in the branches

of study now required by law to be taught in the common schools of this territory, and shall be introduced and studied as a regular branch, in the same manner and be governed by the same rules which govern the study of any other branch, and shall be so studied by all pupils in all departments of the public schools of the territory and in all educational institutions supported wholly or in part by money from the county or territorial treasury.

SEC. 2. Upon complaint in writing being made to any county superintendent of common schools by any district or school clerk or by any head of a family that the board of school directors of the district in which such school or district clerk shall hold his office, or said head of a family shall reside, have failed to make provisions for the teaching of Physiology and Hygiene as provided in section one of this act in the public schools of such district or have failed to have the same taught in the public schools of such district as provided in said section one, it shall be the duty of such county superintendent to at once investigate the matter of such complaint, and if the facts therein complained of are found by him to be true, he shall immediately notify the county treasurer of the county in which such school district is located, and after the receipt of such notice it shall be the duty of such county treasurer to refuse to pay any warrant drawn upon him by the board of directors of such district, subsequent to the date of such notice, and until he shall be notified to do so by such county superintendent. Whenever it shall be made to appear to the said county superintendent, and he shall be satisfied that the board of directors of such district are complying with the provisions of said section one of this act, and are causing Physiology and Hygiene to be taught in the public schools of such district as provided in section one, he shall notify said county treasurer, and said treasurer shall thereupon honor the warrants of said board of directors.

SEC. 3. Upon complaint in writing being made to the superintendent of public instruction by two or more heads of families having children attending any educational institution supported wholly or in part by money from the territorial treasury, that any such educational institution has failed to make provisions for the teaching in such institution of Physiology and Hygiene as provided in section one of this act, or has failed to have the same taught therein as provided in said section one, it shall be the duty of such superintendent of public instruction to at once investigate the matter of such complaint, and if the facts therein complained of are found by him to be true, he shall immediately notify the territorial treasurer and after the receipt of such notice it shall be the duty of such territorial treasurer, to refuse to pay any warrant drawn upon him by or on account of such educational institution subsequent to the date of such notice and until he shall be notified so to do by such superintendent of public instruction. Whenever it shall be made to appear to the said superintendent of public instruction, and he shall be satisfied that such educational institution is complying with the provisions of said section one of this act and is causing Physiology and Hygiene to be taught in such institution as provided in section one, he shall notify said territorial treasurer, and said treasurer shall thereupon honor the warrants of such educational institution.

SEC. 4. Any county superintendent of common schools or any superintendent of public instruction who shall fail or refuse to comply with the provisions of this act, or to perform the duties imposed upon him by this act, shall be liable to a penalty of one hundred dollars, to be recovered in a civil action in the name of the territory, in any court of competent jurisdiction, and the sum recovered shall go into the common school fund of the county or territory, as the suit may be

against a county superintendent or the superintendent of public instruction; and it shall be the duty of the prosecuting attorneys of the several counties in the territory to see that the provisions of this section are enforced.

SEC. 5. No certificate shall be granted to any person to teach in the public schools of this territory, or in any educational institution receiving money from the territorial treasury, after the thirtieth day of June, A. D. 1887, who has not first passed a satisfactory examination in the manner now provided by law for the examination of teachers in the public schools, in Physiology and Hygiene, with special reference to the effects of alcoholic drinks, stimulants, and narcotics upon the human system.

SEC. 6. All laws or parts of laws inconsistent with the provisions of this act are hereby repealed.

SEC. 7. This act shall take effect and be in force from and after the first day of July, A. D. 1886.

IOWA.

FEBRUARY, 1886.

AN ACT to Provide for the Teaching and Study of Physiology and Hygiene, with Special Reference to the Effects of Alcoholic Drinks, Stimulants, and Narcotics upon the Human System, in the Public Schools and Educational Institutions of the State.

Be it Enacted by the General Assembly of the State of Iowa:

SECTION 1. That Physiology and Hygiene, which must in each division of the subject thereof include special reference to the effects of alcoholic drinks, stimulants, and narcotics upon the human system, shall be included in the branches of study now and hereafter required to be regularly taught to and studied by all pupils in the common schools, and in all normal institutes, and normal industrial schools, and the schools at the Soldier's Orphan's Home and Home for Indigent Children.

SEC. 2. It shall be the duty of all boards of directors of schools and of boards of trustees, and of county superintendents in the case of normal institutes, to see to the observance of this statute and make provisions therefor, and it is especially enjoined on the county superintendent of each county that he include in his report to the Superintendent of Public Instruction the manner and extent to which the requirements of section one of this act are complied with in the schools and institutes under his charge, and the secretary of school boards in cities and towns is especially charged with the duty of reporting to the Superintendent of Public Instruction as to the observance of said section one hereof, in their respective town and city schools, and only such schools and educational institutions reporting compliance as above required shall receive the proportion of school funds or allowance of public money to which they would be otherwise entitled.

SEC. 3. The county superintendent shall not after the first of July, 1887, issue a certificate to any person who has not passed a satisfactory examination in physiology and hygiene with special reference to the effects of alcoholic drinks, stimulants, and narcotics upon the human system, and it shall be the duty of the county superintendent as provided by section 1771, to revoke the certificate of any teacher required by law to have a certificate of qualification from the county superintendent; if the said teacher shall fail or neglect to comply with section one of this act, and said teacher shall be disqualified for teaching in any public school for one year after such revocation and shall not be permitted to teach without compliance.

Approved February 17, 1886.

MARYLAND.

APRIL 5, 1838.

"Be it enacted by the General Assembly of Maryland, That the nature of alcoholic drinks and narcotics, with special instruction as to their effects upon the human system in connection with the several divisions of the subject of Physiology and Hygiene, shall be included in the branches of study taught in the common schools, and shall be taught to and studied by all pupils, whose capacity will admit of it, in all departments of the Public Schools of the state, and in all educational institutions, supported wholly, or in part, by money from the state; and that the said study shall be taught to and studied by said pupils in said schools as thoroughly and in the same manner as other like branches are there taught and studied, with text-books in the hands of pupils where other like branches are thus taught."

CONNECTICUT.

APRIL 9, 1886.

Physiology and Hygiene relating especially to the effect of alcoholic liquors, stimulants, and narcotics on the human system, shall be taught as branches of study in the public schools, and persons desiring to teach in such schools, shall, after June, 1887, be found qualified to teach said branches of study before receiving their certificate required by law.

The State Board of Education shall prescribe the text-books to be used in teaching Physiology and Hygiene as required by law and shall prepare or cause to be prepared a text-book and, if desirable, charts for such teaching, which text-books and charts shall be furnished to towns and school districts, for the use of school in the public schools needing the same.

The Secretary shall take out a copyright for the State upon any text-book or chart prepared under this act.

UNITED STATES.

JUNE, 1886.

A Bill to provide for the study of the nature of alcoholic drinks and narcotics, and of their effects upon the human system, in connection with the several divisions of the subject of Physiology and Hygiene, by the pupils in the public schools of the territories and of the District of Columbia, and in the Military and Naval Academies, and Indian and colored schools in the Territories of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

That the nature of alcoholic drinks and narcotics, and special instruction as to their effects upon the human system, in connection with the several divisions of the subject of Physiology and Hygiene, shall be included in the branches of study taught in the common or public schools, and in the Military and Naval Schools, and shall be studied and taught as thoroughly and in the same manner as other like required branches are in said schools, by the use of text-books in the hands of pupils where other branches are thus studied in said schools, and by all pupils in all said schools throughout the Territories, in the Military and Naval Academies of the United States, and in the District of Columbia, and in all Indian and colored schools in the Territories of the United States.

SEC. 2. That it shall be the duty of the proper officers in control of any school, described in the foregoing section to enforce the provisions of this act; and any

such officer, school director, committee, superintendent, or teacher who shall refuse or neglect to comply with the requirements of this act or shall neglect or fail to make proper provisions for the instruction required and in the manner specified by the first section of this act, for all pupils in each and every school under his jurisdiction, shall be removed from office, and the vacancy filled as in other cases.

SEC. 3. That no certificate shall be granted to any person to teach in the public schools of the District of Columbia or Territories, after the first day of January, Anno Domini eighteen hundred and eighty-eight, who has not passed a satisfactory examination in Physiology and Hygiene, with special reference to the nature and the effects of alcoholic drinks and other narcotics upon the human system.

The following "Act" was passed Nov. 24, 1886, by the Legislature of Vermont, since this address was given and is appended in order to give a complete record of the legislation of the country on this topic.

CHAIR. PUB. COM.

VERMONT.

AN ACT to provide for the study of scientific temperance in the public schools of the state of Vermont.

It is hereby enacted by the General Assembly of the State of Vermont:

SECTION 1. In addition to the branches in which instruction is now required by law to be given in the public schools, instruction shall also be given as to the nature of alcoholic drinks and narcotics and special instruction as to their effects upon the human system in connection with the several divisions of the subject of Physiology and Hygiene. And such subjects shall be taught as thoroughly as arithmetic and geography are taught in said schools. Such instruction shall be given orally to pupils who are not able to read and shall be given by the use of text-books in the case of pupils who are able to read. And such instruction shall be given as aforesaid to all pupils in all public schools in the State.

SEC. 2. The text-books used for the instruction required to be given by the preceding section shall give at least one-fourth of their space to the consideration of the nature and effects of alcoholic drinks and narcotics; and the books used in the highest grade of graded schools shall contain at least twenty pages of matter relating to this subject. Text-books on Physiology in use in the schools at the time this act takes effect, which are not in accordance with the requirements of this section, shall be changed for books satisfying the requirements of this section, except when previous contracts as to such text-books are now in force.

SEC. 3. Each teacher of a public school in this State shall, before lodging the school register with the district clerk as provided by section 620 of the Revised Laws, certify therein whether instruction has been given (in the school or grade presided over by such teacher) as required by this act; and no public money shall be paid over to the treasurer of a union or other district unless the register of such district contains the certificate of the teacher that instruction has been given as required by this act.

SEC. 4. All acts or parts of acts heretofore enacted referring to the study of Physiology and Hygiene, which shall give special prominence to the effects of stimulants and narcotics upon the human system, or to the selection of text-books to be used in the pursuance of that study, are hereby repealed, except those relating to the examination of teachers in this branch.

SEC. 5. This act shall take effect from its passage, but shall not apply to the division of the public school moneys made in 1887.

Approved November 24th, 1886.

To give the phraseology of each statute, with the date of its passage, is meagre recital indeed ; the heart of the movement, the spirit of the work, can only be known by attention to the details of the siege. The states of New York and Pennsylvania may speak for all.

PETITION TO THE NEW YORK LEGISLATURE.

" Believing that prevention through the education of the people is the antidote for the vice of intemperance, we, the undersigned citizens of ————, respectfully petition our Legislature now in session to enact laws requiring instruction in Physiology and Hygiene, which shall give special prominence to the effects of alcoholic drinks, stimulants, and narcotics upon the human system, to be given in all schools supported by public money or under State control."

VOTERS.

WOMEN.

Immediately after the election of Representatives and Senators, this petition was sent out for signatures, those circulating the same aiming always to secure the names of a majority of the legal voters of the community. Little or no use was made of the press, thus guarding against arousing the powerful opposition of the liquor interest. Literature on this subject was scattered by those circulating petitions. Circular letters were sent to the tens of thousands of pastors of the State, asking co-operation. A personal letter was sent, with a copy of petition and of laws of other states, to each member of the Senate and Assembly, reaching him immediately after his election, asking his aid. After election, lectures on this subject were given in towns and cities — the residences of Representatives and Senators in the near-coming Legislature. Frequent letters followed these men to the Capital, reminding them of the unabating interest of the people in the success of the measure. Other agencies, suggested by woman's ingenuity and earnestness, or man's experience, were employed ; to write of them all would fill a book. No lobbying was done in Albany. It was not deemed wise to arouse opposition by asking for a hearing before committees of the Legislature for W. C. T. U. advocates of the bill. Steady platform-work among the people roused a tide of popular sentiment that was turned upon the Legislature, until its members, hearing from their constituents, knew they must vote for what was called the " Hygiene Bill." Shortly after its passage, Miss Elizabeth Greenwood, of Brooklyn, who, in association with Mrs. Hunt and Mrs. Alford, had directed the work, wrote in her report to the W. C. T. U. of the State of New York :—

Six short months, and prophecy has become history; uncertainty, certainty; prayer, praise: six short months of unparalleled labor, resulting in the greatest temperance victory our State ever gained. How long Richard Cobden waited for the repeal of the corn law! How long Bismarck waited for the fulfilment of his hopes in unifying and solidifying Germany! How long Garibaldi waited for the redemption of Italy! How long Gambetta waited to see France a Republic! How long our own Abraham Lincoln waited in misunderstanding and obloquy for the time when he could write the emancipation proclamation! How long Neal Dow waited for prohibition in Maine, and the constitutional amendment so recently gained! But in six short months, by a series of marked Providences, God has led us to victory. . . .

And now *what* have we gained? Let us recapitulate a little as we answer this question. A tremendous agitation for temperance has been felt throughout our State. Five thousand (5,000) clergymen, and through them their churches, have been aroused. Senators and Assemblymen, Regents, School Commissioners, and other Educators have been forced to think upon this evil of evils, and our chosen remedy. Large assemblies in churches, halls, and institutes have listened with enthusiasm to the truth, and given a unanimous *aye* to our appeals. Dead Unions have been revived and new organizations formed. Over 40,000 pages of literature have been circulated by this department alone, and many more thousands by the local Unions; also over 25,000 petitions, 5,000 circulars, 800 posters, hundreds of copies of laws in other states, and our own state law, 5,000 letters to clergymen, and 300 copies of the National Plan.

By the culmination of all this effort, we have gained the right to educate the million and a half of children in our public schools in regard to the insidious nature of alcohol—that foe which has broken more hearts and shadowed more homes than any other national enemy.

PENNSYLVANIA.

The details of the legislative work in Pennsylvania were somewhat different; the preparatory educational work had been very similar. Mrs. Jos. D. Weeks, of Pittsburg, Superintendent of this department of Woman's Christian Temperance Union work, in her report to the annual meeting of that society in 1885, blends the humorous with her really thrilling account of the long siege:—

“An amusing chapter might be written regarding these petitions. Fresh and fair they went forth, two and two, as Noah's animals entered the ark, but returned rudely divorced in many cases, and firmly united in others. The tie that bound them ranged from the daintiest white ribbon, through all the gradations of silk, cotton and woolen cord, twine, and yarn, up to *bona fide* iron wire,—and a good quality of that, as the long-suffering ‘brother-in-law of the W. C. T. U.’ decided when his aid was invoked to sever the knot. The weary hours and days spent in counting signatures are now far enough behind not to appall us with their memory; but I am quite reconciled never to be rich, if it involves counting my money twice over, and a penny at a

time. We actually felt lonesome at our house when the last box of petitions started to Harrisburg. The total number of signatures of which I have positive knowledge—coming from fifty-five different counties—is 102,581. I am convinced that this number falls considerably below the actual aggregate of signatures obtained.

“When Mrs. Smith wrote me, ‘I send you a set of petitions signed by one hundred saloon-keepers of Germantown, and suggest that you present them separately.’ it seemed an absurdity! Saloon-keepers ask to have their children taught to shun their fathers’ business? Why, the Legislature will ridicule it as a mockery! But when that petition came, and I turned it page after page, and read the foreign signatures,—Irish, German, and what not, men and women, too,—it was the most touching tribute to the merit of our cause that had yet met my eyes. It was the father-heart and mother-heart of even saloon-keepers, trying to save their children from the poverty and sorrows of a drunkard’s life. And that petition *did* stay by itself; and when the bright, clean covers went on, with their printed inscription and gilt fasteners, “One hundred saloon-keepers of Germantown” spoke to each of the 251 members of the State Legislature.

“There was little opposition in the Pennsylvania Senate—40 out of 51 members voting for it. In the House, the first reading was quite uneventful, as is usual; but before the ‘second reading’ the ‘book job’ story had been started by lobbyists, who represented Mrs. Hunt as the champion book agent, anxious to reap a fortune out of the sale of ‘Hygiene for Young People,’ and all W. C. T. U. women as aiders, and abettors, and partakers of the spoils. This slander was vigorously repudiated, by personal letters to Senators and Representatives, from the ladies interested in the passage of the bill, and by a printed denial from the publishers of the works.

“On the evening of March 17th, just before the second reading in the House, Mrs. Hunt addressed the Legislature in the Hall of the House of Representatives. Those most conversant with the state of affairs in Harrisburg affirm unhesitatingly that this address changed fifty votes in favor of our bill. Next morning, when it came up for second reading, that famous petition scene occurred which, we think, has never had a parallel in the history of legislation in Pennsylvania. A large delegation of Philadelphia and Harrisburg ladies were interested spectators in the gallery, and for one solid hour those wonderful petitions poured in—first from the member to the right, then on the left, sometimes a half-dozen on the floor at once, till at last it actually

became amusing. Most of the members had received urgent letters from their constituents, asking them to vote for this measure ; and the names on the petitions showed to them the wishes of parents and taxpayers in the districts they represented. Mr. A. D. Glenn, of Armstrong County, was the faithful champion of the bill in the House, ably seconded by Mr. Theodore K. Stubbs, of Chester County, Mr. Brosius of Lancaster County, and others we could name. As the roll-call went on, and aye followed aye in quick succession, the result was not long in doubt, and 160 ayes, with only 7 noes, passed the bill triumphantly to a third reading. This we knew would be the "crucial test," as renewed opposition had been manifested through the efforts of book agents and enemies of temperance, *per se*, and anxious hearts went to the Capitol that bright March morning. The little company that united in prayer with Mrs. Hunt before starting, felt that all for which they had worked and prayed so many weary months was trembling in the balance. But, leaning upon the arm of the Lord of Hosts, they went up the hill to the State Capitol. There were Mrs. Hunt, and the State Corresponding Secretary, who had all the year long worked in the interest of this department as if it had been her own ; a large delegation from Philadelphia, all the Harrisburg ladies, and the State Superintendent ; and with anxious faces they filled the gallery. The morning session passed, and though several members courteously withdrew their bills from the calendar that ours might have an earlier place, still at the noon hour of adjournment it had not been reached, but was first on the calendar for the afternoon.

"Its reading was the signal for a series of filibustering tactics on the part of a few opponents that may have been no novelty in Harrisburg, but was none the less a trial to us. The gentleman from Philadelphia had a poem on 'Physiology and Hygiene,' which he read. They told us he always did read one during a session, and we got the benefit of this one. Some of the Philadelphia ladies, we believe, had the privilege of criticising and 'scissoring' it somewhat beforehand ; but by the time he had finished, the House was in a roar of laughter, in which we were forced to join. The following verses will give an idea of the peculiar style of this poetical 'gem' :—

But now, Anno Domini eighty-five,
 Blessed woman evolves a plan
 By which she eventually hopes to secure
 The absolute control of man.

On his wine and beer, tobacco and cigars,
 She will place a permanent lien,
 By teaching the boys and girls to shout
 Physiology and hygiene.

Out from the city, adown from the farm,
 With many a grace and with many a charm,
 Ladies came trooping, numerically strong,
 To tell of the why, the wherefore, the wrong
 Of tobacco and cider, wine, whiskey, and gin:
 And they gather us in; aye, they gather us in.

Ah! who could resist a pressure so great,
 Combining the best of the Church and the State,
 The good and the wise, who come in their might,
 Determined, at last, to put mankind aright?
 And with justice to guide them, they go in to win:
 And they gather us in; aye, they gather us in.

"This poem was followed by ineffectual attempts to amend the bill and take all the life out of it, the ayes and noes being called, each time consuming at least fifteen minutes in the operation. Then followed speeches by the gentleman from Centre County and the one from Clinton County, who, having exhausted all the stereotyped arguments so often met and answered, renewed the charge of a 'book job scheme,' and wound up by asking an 'extension of time,' and reading a lengthy newspaper article. It was within a very few minutes of the hour of adjournment, and our only hope was in getting an extension of the session. By wise management on the part of our friends, and the prompt action of Speaker Graham, of the House, which we are glad to recognize, this was done despite the angry protest of a member from Philadelphia. Representatives who were friends of the bill, and had desired to leave the city at 4 P. M. on urgent business, gladly waited to prove their loyalty to their constituents who had written them, urging their support of the measure. Shortly before six o'clock the ayes and noes were called for the last time; and on the 31st of March, by a vote of 131 to 39, the now famous bill lacked only the Governor's signature to become a law of this Commonwealth. As the announcement came from the Speaker's desk, and was met by loud applause from the floor, our repressed emotions found instant expression in the beautiful 'Chautauqua salute,' and for a time the 'lilies bloomed' as spontaneously in the halls of legislation as ever they have done in summer-time by the lakeside in Northern New York. We believe that afternoon session will be historic, and our only regret was,

that our State President and more of our ladies could not have had the delight of being present that last half hour.

"In the evening a call upon Governor Pattison, to bespeak his official endorsement of the bill, convinced us that it would promptly receive his signature if it met his approbation. This it did, and was returned to the Legislature, duly signed and sealed, April 2, 1885."

CONGRESS OF THE UNITED STATES.

The first National Scientific Temperance Instruction bill was drafted by Senator Henry W. Blair, of New Hampshire, and introduced by him in the Forty-Eighth Congress. He urged its attention upon the committee to which it was referred, but it got no further on in that Congress. From time to time he pressed this national movement for temperance instruction in the schools upon temperance workers, but their attention was otherwise absorbed. In the fall of 1885, he urged Mrs. Mary H. Hunt, of Massachusetts, to at once come to Washington and begin an aggressive campaign, pledging to her his co-operation and support. In the midst of numerous calls from states with Legislatures about to assemble, and where legislation in this interest was desired, she hesitated, not knowing which of the many calls was most imperative. The outcome of her Washington work proves the wisdom of her decision. After six months of the most unremitting toil at Washington, with never-ceasing aid from women in every state and territory in the Union, there was enacted by the Congress of the United States, and signed by the President, the best Temperance Education Law—because the most specific—ever enacted, requiring all pupils in all schools under Federal jurisdiction to be taught the nature and effects of alcoholic drinks and narcotics. General Cutcheon, Congressman from Michigan, in a jubilee meeting held at Washington on the occasion of the passage of the bill, said:—

On Monday last my colleague from Michigan, Mr. O'Donnell, having charge of the bill for the Committee on Education, rose in his place in the House, and moved to take up Senate Bill 140, to provide for the study of the nature of alcoholic drinks, etc., suspend the rules, and pass the same. The bill was taken up, no speeches were made, and it was put upon its immediate passage. The roll of the House was called, and 209 responded in the affirmative, and only 8 in the negative, and the bill was passed. Two or three days later the President put his signature to the bill, and it quietly took its place upon the statute books of this country.

Without shock or jar, this act became the law of the land. We are here to-day to give expression to our congratulations over this great step forward. Its passage has spread joy throughout the land, among those who have sought its enactment. But on the next morning I looked over my morning paper to note what was said in

regard to it. In the editorial columns I found not a word. I looked in the proceedings of the House of Representatives, and found not so much as a line in relation to its passage. In an unobtrusive part of the paper I found a bare notice that the bill, simply announcing its title, had been passed by the House, but without one word of comment thereon. Then I turned to history for consolation. I remembered that on one wintry day in 1620, a few devout and God-fearing men assembled in the humble cabin of a lonely ship off the shores of Massachusetts Bay, and signed a compact of civil government for their infant colony. That act was not even mentioned in the morning papers; it attracted the attention of no one. But in the fullness of time that compact became the germ of free government, the charter of popular liberty. So this law, that now so quietly and unostentatiously takes its place among the laws of the land, will, in the course of years, become the *Magna Charta of the liberties of our children*.

My friend, Senator Blair, has been introduced here as the gentleman who presented this bill in the Senate. My colleague, Mr. O'Donnell, has been commended because he reported the bill from the Committee on Education, and managed it upon its passage through the House. I have been honored by the mention that I introduced it in the House of Representatives. I was glad to be identified even to that extent, with the passage of the message. But let me do an act of justice, and say that I do not think that to any of us belongs the honor of the real work of the passage of this bill. That belongs almost wholly to Mrs. Hunt and the two hundred thousand noble women of the organization which she represents. A few years since I was professionally connected with a certain legal association in the West. I remember the first paragraph of their instructions to attorneys was, "Make things happen lively." Mrs. Hunt has been the one who has made things "happen," and she has made them happen lively, also. She has made it happen that petitions bearing the signatures of nearly 150,000 persons have reached the two houses of Congress. She has made it happen that nearly every member of the House has received numerous letters from his constituents in favor of this bill. Other things have "happened" which have gone to create a public sentiment in favor of the bill, which I will not mention, for I am not here to publish the secrets of this now victorious campaign. It is sufficient to say, that while we at the Capitol were doing our part, from a little room in the northeast quarter of this city went out the messages and the influence that "made things happen." Never was campaign more skilfully conducted or more successfully ended. It was prosecuted with that untiring zeal, and that unwavering faith, that learns not only to labor, but also to wait.

With all consideration for the Senator who presides, and without detracting anything from the honor due my colleague for the gallant fight he conducted in the committee, without even mentioning my own little share, I think that the chief honor of this occasion belongs to our friend, Mrs. Hunt. We have gained only the first step. The great struggle lies yet before us,—to enforce the law. To-day it is the law of this District and throughout the broad territories, our future states, that every child shall be taught the nature of alcohol and narcotics. Education is the basis of self-control. Education differentiates the savage from the civilized man. Education is the formation of public sentiment,—that public sentiment which underlies all law, comprehends all law, is all law.

Months will come and go, years may pass,—even ten years,—and the outward change may not be very apparent. But the change will be going on; education will be doing its work; public opinion will be forming, and will shape itself into law, and we shall come at last into a brighter day, into a broader light, into a better hope, into a loftier living.

A significant feature of this legislation has been its truly non-partisan character. The champions and supporters of these bills in State and National Legislatures have been wisely chosen from the different political parties of this country, and the heart of the man and the father has been true to the interests of the children. The blight of partisanship, so disastrous to legislation in the interests of moral reform, has never fallen upon this work. As without the Army of the Republic, Gen. Grant might have lived and died a tanner, so without the Woman's Christian Temperance Union, these victories for scientific temperance instruction, even under the magnificent generalship of Mary H. Hunt, would have been impossible. It was this grand army of Christian women, with divisions in every state, regiments in every county, and companies in so many villages and hamlets, that quickly responded to the leaders' call, and each in their place did the work assigned them, that made this wondrous triumph possible.

LEGAL PROVISIONS.

A study of the terms of these statutes will reveal their common origin, in the desire of the people that the children of the country shall be taught what alcohol is and what it does. Even in those enactments least suited to accomplish this result, because mutilated in their legislative passage by adverse interests and the aggressive opposition of the liquor traffic, there can be no mistaking the intent. The main features of all these laws are, that Physiology and Hygiene, not for their own sake chiefly, but with *special reference* to the effect of alcohol and narcotics upon the human system, shall be regularly taught in all grades of the common-schools; that teachers shall receive or retain certificates of qualification to teach, only upon satisfactory examination in these studies; and that school boards or other officials acting as trustees of state funds, shall forfeit the same upon failure to comply with the conditions of the law. The laws most effective contain this last "forfeiture clause," because unless these special acts are enforced by general compulsory provisions, as in the ancient law of *mandamus* or by such "penalty clause," they promise little more than convenient media for occasional and irregular teaching, at the option of the school board or the teacher. The Pennsylvania, Iowa, and Washington Territory Statutes are models in this regard. The provision requiring examination of teachers in these branches before receiving certificates is common to all, with a very few exceptions. In Missouri the law has no compulsory feature, but merely provides for

the lawfulness of the teaching to those children whose parents make written demand. This can scarcely be termed a temperance instruction law, though under its provisions the temperance people of St. Louis have attempted such teaching as they were able to accomplish through this insufficient legislation. The compulsory provision concerning the qualification of teachers takes effect in September of this year. In Ohio, Indiana, Illinois, New Jersey, and a few other states, vigorous efforts were made for these statutes; and present failure is not defeat,—merely repulse.

Many questions have arisen in the enforcement of these statutes.

Shall the required teaching be oral or from text-books?

If oral, shall the lessons be given daily or semi-weekly, or if otherwise, how often?

If oral to the younger, and from text-books to the older, at what grades shall the changes be made?

What is meant by the words “in each division of the subject”?

What text-books do, and what do not, fill the requirements of the law?

How can elementary text-books be used as supplementary readers?

Can this study be by occasional substitution, as a language lesson?

Much ingenuity has been exhibited by conscientious teachers and school officials, in the preparation of analyses of subjects to be taught and in syllabuses of teaching desired to be given.

CO-OPERATION.

State Superintendents of schools and teachers have very generally made immediate response to the requirements of these laws, and given rulings as to their provisions, in harmony with their letter or spirit; and in general they have enforced the legislative intent, and given hearty co-operation in securing the greatest benefits. In Kansas, which so royally entertains us to-day, the State Superintendent of Public Instruction at once issued a ruling in regard to the necessary preparation of all teachers in this branch, and that the teaching was compulsory, and must be given to all pupils. In Iowa, Superintendent Akers gave like speedy and hearty assent, as indeed might be expected from the Superintendent of Schools in a State which boasts the least illiteracy of any State in the Union.

Dr. E. E. Higbee, State Superintendent of Public Instruction in Pennsylvania, in his report for 1885, says concerning the study of Physiology and Hygiene:—

In regard to the recent law requiring Physiology and Hygiene to be taught as part of the necessary curriculum of our public schools, a word here may not be out of place. Of course, where children cannot read intelligently or with ease, it would be a monstrous perversion of ordinary common sense to expect them to use a text-book. Their instruction, to be such and not a farce, must be oral; and such instruction *must* and *ought* to be given, properly adapted to the *age* and *attainment* of the pupil. In higher grades, *text-books* in full conformity with the meaning and purpose of the law should be used; and thus *all* pupils, whether of low or high grades, will receive instruction. Only *enmity* to the law can warrant such an *interpretation* as will defeat its own purpose, which plainly is, that all our children shall gain as much knowledge of Physiology and Hygiene as our common schools, with their limited sphere, can give, accompanied at *each step* with a proper *practical* application of this knowledge in reference especially to the effects of alcohol and narcotics on the human system. Such knowledge is in itself of *vast account*; and such special application of it, in way of warning, properly belongs to the moral discipline which should characterize all teaching, whether required by definite statute or not. The law-abiding habits of teachers and directors give abundant assurance that this law will be fully obeyed. We are willing that time shall demonstrate how far it may serve to remove one of the greatest curses that pollute social life. The fathers and mothers of this Commonwealth will be more than thankful for anything which may aid their children in keeping away from those temptations which they themselves so much fear, and from which so many of them have been made miserable and broken-hearted.

Aside from the special knowledge acquired by this study, hundreds of pupils in the schools of this country are studying Physiology and Hygiene who before knew nothing of the human frame, or of its proper care,—these subjects having been taught in the higher grades only, which the larger number of common-school children never reach.

From one City Superintendent comes this testimony :—

Whole number pupils enrolled	23,000
Whole number studying Hygienic Physiology	23,000
Number under former method	250

From another :—

Whole number enrolled	1,110
Whole number studying Hygienic Physiology	1,110
Number under former method	None

This Superintendent writes: "It has not interfered with the proper preparation of other studies, as shown by examination results. It has given more variety to the elementary course, and many have become more observant. Primary children have commented upon crimes or casualties, if they were in any way traceable to drink, and general hygiene laws are less frequently violated.

From another and smaller school :—

Whole number enrolled	713
Whole number studying Hygienic Physiology	713
Number under old method	100

This proportion is found to be general, as shown by reports from

many states. To Boards of Health have in some instances been given the choice of text-books for this study. Of the nature of alcohol in therapeutics, these gentlemen are doubtless standard authority; of the relation of the use of alcoholic beverages to the common weal, and the proper arrangement of scientific truth in the text-book for the child, the opinions of others may be of equal weight; indeed, it has sometimes seemed that the judgment of the physician has been against the best teaching, because of this technical knowledge and professional practice.

TEXT-BOOK WAR.

One of the natural results of the enactment of these laws, and the consequent introduction of suitable text-books that will fulfill their intent, has been the tendency to develop what is known among school-book publishers as a "text-book war," the conditions of which are unlike those concerning any other text-books. Book publishers and book agents do not desire to create or continue this controversy, and they are powerless to prevent or control it. It originates from no mere business rivalries, but grows out of the intense convictions of the friends of these laws, that the measure is needed for the good of the children. Hence their earnest efforts to secure the very safest instruction possible upon this subject so closely related to the foundation habits of their children and the future of their characters.

Those who are directing this great work do honestly desire to so conduct it as to avoid the unpleasant antagonisms of commercial interests, and the bitter retaliations of rival publishing houses; but no power on earth can hush the voices of the fathers and mothers of this land, vitally interested in this instruction of their children, because of the relation that instruction will sustain to what their children shall yet be. As Mrs. Miller, of Iowa, tersely says:—

The women of the W. C. T. U. have no apology to make for their intense interest in the physiologies which shall be adopted by the School Boards of Iowa. That interest is their right, as mothers of the children who must study the books. It was the mother-interest in the moral welfare of the children in the direction of total abstinence, which prompted the effort to secure the law requiring scientific temperance teaching in our schools; and that interest is now extended to the kind of books which shall be put into the hands of the children, from which they shall learn the effects of acohol upon the human system.

The right and duty of mothers to be interested in the education of their children is not only admitted, but urged on all hands. Because a woman is a W. C. T. U. woman is no reason she should be less interested in the books her boys and girls study. Yet just at this time we hear from various sources about "meddling

women," those "W. C. T. U. women," "women interfering about text-books." Women do not cease to have the mother-interest in their children because they are members of a temperance organization; the rather is that interest intensified in all directions of moral welfare.

Sad indeed would it be if, through the indifference of mothers, and the prejudices of those entrusted with the selection of text-books to carry out the letter and spirit of the law, if such books as do not teach the whole truth concerning the physical effects of alcoholic beverages and narcotics, should be put into the hands of the children. It would be strange inconsistency to teach a child in school that the moderate use of alcohol is good as an invigorating beverage, when the law makes the selling of liquors a criminal offence. The mother-interest in the books to be used under the new law is legitimate, and its active, intelligent exercise in every school district should influence the selection of all books that go into our schools.

But mothers are not alone in their indignant protest against books that are scientifically unsound, and openly or covertly insinuate popular fallacies. Fathers who never worked or believed in prohibition stubbornly insist upon such teaching for their children as will incline them to total-abstinence habits.

* * * * *

Dear friends, all about us are beauties our eyes have never seen, are harmonies our ears have never heard. You whom I am honored this morning in addressing, those who represent the education and the liberal culture of this Republic, some of you know all histories,—can tell the story of the human race from prehistoric times. You have studied all philosophies, and can speak with "other tongues" than those in which your mothers sung their lullabies; you know the mysteries of the laboratory, the affinities of atoms, and the waste of cells; you can weigh the substance of the earth, can measure the water in the sea, can tell us of the winds of heaven, whence they will come and whither they will go; you can keep time with Jupiter and Mars, count Saturn's rings, and, by your knowledge of the steady poise of world by world and sun by sun, could tell us that in yon empty space, beyond the naked eye or reach of lens, a planet waited long to greet the raptured gaze of the patient watcher, when with added lens on lens he swept the starry dome.

Have you turned the lens of patient study and receptive minds toward this reform, which, like the pyramid in Egypt's sands, is related to all truth, is a revelation of all science? Do you know the affinities of alcohol for brain tissue, and its drain on vital forces? Have you measured the sorrows and counted the woes this curse has brought? Can you translate the warning signals that foretell the storms which,

like hurricanes, sweep human souls over when wine hath done its work? Have you heard the babbling tongues inflamed by drink? Can you tell the philosophy by which the touch of alcohol on muscle, vein, and artery disturbs physical functions, paralyzes mental activities, dethrones reason, and destroys the spiritual nature, which links us to the divine? Have you read this history of the siege for the soul of man? Oh, behold the harmonies of this wondrous reform—its beautiful correlation of the forces which make for righteousness!

I well remember the first time I saw that wayside flower which holds the glory of the morning sun till, on his couch of gold he rests at set of day—the golden-rod. I must have passed it when a child at play, I crossed the fields of dear old Massachusetts, strung ox-eye daisies, and gathered purple asters, but my eyes were closed to all its glory till one day, by the prairies of Iowa, I sat at a railway station and waited for the coming train. A friend close by, whose heart responded to every touch of Nature's hand, said, "O see the golden-rod, Whittier's golden-rod, that close with purple asters grows," and then my eyes were opened, and I saw the golden-rod. Now, when the summer sun grows hot, I watch for the first tall, waving plume and glory in the cloth of gold by every wayside spread; and when the frost of coming winter turns its gold to russet brown, I am comforted only by the faith that it will bloom again. To me it was once the commonest wayside weed; now 'tis a glory and a joy.

Educators of my country, is temperance to you a common wayside weed, or have your eyes been opened, and do you see the cloth of gold? You have not been anointed by the rites of ecclesiasticisms; you have not been commissioned by laying on of hands to minister in the temples of religion; but not less than these are you high-priests at our country's altars, if you shall rightly minister to those of whom the great Teacher said, "Of such is the kingdom of heaven." Then shall his reform in your hands bestow upon our people the royal purple of real sovereignty, the golden-rod of truth; place in their hands the scepter of their power, the sublime repression of themselves, blooming in the white flower of blameless lives, and giving such a republic as the world has never seen.

*THE EFFECTS OF ALCOHOL ON THE HUMAN SYSTEM,
AND THE METHOD OF TEACHING THEM.*

BY PROF. A. C. BOYDEN, OF BRIDGEWATER, MASS.

Ladies and Gentlemen :

After the very eloquent presentation of the necessity and value of this work in our public schools, which you have just heard, two very practical questions remain for us as teachers. The two are these: What shall we teach? and how shall we teach it? That is, what shall we select from all the mass of material that has been prepared upon this subject, for the young pupil. Much is especially adapted to them. Much we can give them with assurance. Many of the facts can be presented correctly, simply, and effectively to the children. And when we have made our selection, the important question comes, how shall we present the subject according to the best methods of teaching and in such a way as to lead to conviction on the part of the young. Let me say, what I am going to repeat a great many times throughout this discourse, that it is not mere knowledge that we are to teach,—it is conviction that we are to bring to the minds and to the wills of these pupils. Stopping with mere knowledge will not accomplish the work. What shall we teach?

First. A knowledge of the human body: Its external parts; the relations of those parts to each other: The uses of these parts and especially the proper care of them; a knowledge of these delicate organs, the senses that we have and the work which they do for us, and the care which we should take of them. The work done by the important systems within our bodies, the way in which they do that work, and the care which they should receive from us. Not merely a knowledge that we have certain parts, that we use them in certain ways, and that they can be taken care of in

certain ways, but we should lead the mind to a profound conviction of the marvelous construction of our body, the delicate arrangement of its parts, and the duty of each one of us to take the very best care of these houses of our souls. Not the mere knowledge, we repeat, but the conviction of the duty to care for these. This work is a preparation for the later work.

Second. A knowledge of the origin, properties, and uses of the various stimulants and narcotics; that the children may recognize them when they see them; that they may know the properties, and the effects upon the human body, and that they may know why alcohol has this certain influence upon the human body.

Third, and most important, The effects of these narcotics, especially alcohol, tobacco, and opium, upon the human body; what they do and why they do it. Now with your indulgence, I shall hope to offer a few suggestions in answer to these two questions, what shall we teach and how shall we teach it, with some very simple experiments. I have gone to the extreme of simplicity in order to avoid the objections which come from so many teachers who say: "I have had no practice in any laboratory. I am situated in a school where very few, if any appliances are given to me." I wish to present that which can be used by every man and woman in every schoolhouse in this land; requiring no previous laboratory work, requiring no great outlay or expense. Of course in those schools which are more favorably situated, more advanced experiments may be conducted; but I intend to present those experiments which will give a sufficient knowledge of the effects on the human body, so that if it is taught rightly the children will be saved. Now in this work, so far as I can show it before such a large audience, I will leave the subject of general physiology, and come directly to the subject of narcotics, their origin, their properties, and uses, and what they do to the human body; and I have selected for the principal work,

ALCOHOL.

I. ORIGIN OF ALCOHOL.

1. *In Fermented Liquors.*

EXPERIMENT 1. Add molasses to water in a bottle till it is of a deep brown color, then add a teaspoonful of yeast; allow it to stand in a warm place for a day or two. Observation: The mixture has

the odor of alcohol, later a sour, acid odor; the mixture has a sharp taste. Inference: The little yeast has changed the sugar of the molasses to alcohol, this will change to an acid if left alone. Call the yeast plant a "ferment," and the process of changing "fermentation."

EXP. 2. Allow apple juice to stand exposed to the air for a few days. Observation: The liquid has the odor of alcohol, also the biting taste. Later it has a sour, acid taste like vinegar. Inference: Very small ferments from the air have changed the sugar of the apple juice to alcohol. Call the liquid "cider." The alcohol will change to vinegar if left exposed to the air.

Cider is formed by the fermentation of apple juice in the air.

Wines are formed by the fermentation of grape juice, etc., in the air.

Ales and Beers are formed by the fermentation of the sugar of grains. (Malt liquors.)

Alcohol is an essential constituent of all these fermented liquors, Nature will change it to an acid if left to itself.

2. In Distilled Liquors.

EXP. 3. Heat cider or wine in a test tube over an alcohol lamp; pass the steam through a glass tube into a bottle which is wrapped in a wet cloth to condense this steam. Observation: The odor and taste are more marked than in the fermented liquors; often there is a bitter taste. Inference: The condensed liquor is stronger than the fermented liquor and is changed into new substances oftentimes. Call this process of evaporating and condensing "distillation," and the resulting liquid a "distilled liquor."

Brandy is distilled from wines.

Gin is distilled from beer, and flavored with juniper berries.

Whiskey is distilled from the wort of fermented grain.

Rum is distilled from fermented molasses.

II. PROPERTIES AND USES OF ALCOHOL.

EXP. 4. Examine alcohol for its color, odor, and taste. Place a little on the hand. Observation: Alcohol is a transparent liquid, has a strong odor, and a biting taste. Inference: The rapid evaporation of the alcohol makes the hand feel cool—it is a volatile liquid.

EXP. 5. Place a little in a spoon, apply a lighted match. Observation: It burns in a blue, hot flame. Inference: Alcohol is inflammable because it unites easily with the oxygen of the air.

EXP. 6. Shake a little powdered resin in alcohol. Observation: The alcohol changed to the color of the resin; finally the resin disappears. Inference: Some resinous substances are soluble in alcohol.

EXP. 7. Mix a little oil of turpentine with alcohol, shake. Observation: The turpentine mixes with the alcohol. Inference: Alcohol will mix with some oils.

EXP. 8. Add alcohol to the white of an egg (albumen). Observation: The albumen changes the moist, mucilaginous albumen to a white, stringy solid. Call this "coagulation." Inference: Alcohol coagulates albuminous substances by extracting the water from them.

Properties: Alcohol is a transparent liquid, odorous, has biting taste, is volatile. It dissolves many resinous substances, and mixes with most oils. It is inflammable, has great affinity for oxygen. It coagulates albumen—has attraction for water.

Uses, (resulting from these properties). External application to allay inflammation. Alcohol lamps for heating purposes. A solvent for gums in preparing varnishes. In preparation of perfumery, medicine, etc. Preservation of museum specimens.

III. EFFECTS OF ALCOHOL ON THE HUMAN BODY.

1. *Alcohol Impairs Digestion.*

EXP. 9. Place with the finger a little alcohol on the inside membrane of the mouth, (a mucous membrane); repeat this several times. Observation: The membrane stings, the saliva flows freely, finally there is a dry, puckery feeling. Inference: Alcohol inflames the membrane, excites the flow of the liquid which it secretes, and absorbs the moisture in it.

Application: The lining membrane of the mouth also lines the stomach, and the other organs of the digestive system. A small amount of alcohol will cause a profuse flow of the gastric juice and pass very rapidly into the blood. A larger amount inflames and irritates the lining membrane of the stomach. A continued use weakens the quality of the gastric juice by the unusual and irregular flow, also impoverishes the blood from which it comes. It

irritates the constantly inflamed membrane of the stomach, leading to an ulcerous condition and chronic inflammation.

EXP. 10. Add alcohol to raw meat, also rub some meat in water till it is well colored with blood, add alcohol to this blood. Observation: The liquid is full of white particles, and the meat seems hard. Inference: The alcohol has coagulated the albumen of the meat and blood.

EXP. 11. Add alcohol to some of the pepsin of the gastric juice. Observation: The pepsin contains white, stringy particles. Inference: Alcohol coagulates pepsin.

Note. To prepare the pepsin, get from the butcher the inside membrane of a pig's stomach, cut into fine pieces and soak it in glycerine for a few hours. The glycerine dissolves the pepsin, strain through a fine cloth. Prepared pepsin can be bought of the druggist.

Application: Pepsin is the active solvent of the gastric juice. Alcohol tends to harden the food and coagulate the pepsin, thus retarding digestion. Continued use tends to chronic indigestion and to the intensifying of any diseases of the digestive system.

2. *Alcohol Absorbs the Water of the Body.*

Refer to Exps. 8 and 9. Alcohol not only absorbs water from the albumen which it coagulates but the whole system floods it with water to dilute it and render it less harmful. Hence alcohol absorbs the water of the saliva, of the gastric juice, of the blood, of the tissues, and of all the secretions. This soon results in a craving for fluid to supply the body, really a "thirst" for water, requiring time for its absorption throughout the system, but temporarily satisfied by more exciting drink.

3. *Alcohol Destroys the Blood Corpuscles.*

EXP. 12. Prick with a pin under the finger nail and draw a drop of blood; place this on a bit of glass, and examine with a magnifying glass. Observe the way in which the little blood corpuscles are arranged. Touch them with the smallest amount of alcohol. Observation: The corpuscles are of an irregular shape and have lost part of their color. Add more alcohol. Observation: The corpuscles are in an irregular mass of a whitish color. Inference: Alcohol coagulates the albumen of the corpuscles, and dissolves the coloring matter. Refer also to Exp. 5.

Application: Alcohol at once enters the blood, seizes the oxygen that the red corpuscles are carrying to the various parts of the body, dissolves the coloring matter, and coagulates the albumen of these corpuscles; hence the blood partially fails in its work of carrying new matter to the tissues and in eliminating the waste matter. The result is a clogging of the system with effete matter, poisoning of the blood, diseases of the skin, liver, and kidneys. The retarding of the combustion within the body lowers its temperature in direct proportion to the amount of alcohol taken.

4. *Alcohol Ruins the Blood Vessels.*

Observe the crust of earthy matter on the inside of bottles of grape wine. Inference: The earth matter which was soluble in the grape juice is thrown down by the alcohol in the wine.

Application: The mineral matter is being carried by the blood to the bones, is precipitated by the alcohol, and forms a crust in the blood vessels and in all the tissues, making them weak and brittle. As a result blood vessels burst under any unusual strain, and apoplexy results.

5. *Alcohol Paralyzes Nerve Matter. (A Narcotic.)*

EXP. 13. Etherize or chloroform a frog by soaking a wad of cotton and putting it in his mouth, or place a spoonful of ether in a jar of water and immerse the frog. When insensible carefully cut upon the skin and flesh of the leg till the nerve is exposed. Touch a drop of alcohol to the exposed nerve. Observation: The nerve becomes stiff and white, the trembling of the limb ceases. Inference: Alcohol has paralyzed the live nerve matter.

Application: A small dose of alcohol causes incipient paralysis of the nerves of the tissues and brain, this causes an extra activity for the purpose of diluting and expelling the poison from the system, manifested by the "animated appearance, the throbbing of the arteries, the flush of the face, and the sparkle of the eye." This paralysis also numbs any feelings of pain, apparent benefits arising from previous paralysis. The paralysis of the nerves controlling the muscular walls of the capillaries weakens their elasticity, at the same time the heart increases its action, hence the blood tends to remain near the surface, and an extra radiation of heat takes place, a second reason for the lower temperature of the body.

Increase the dose and the paralysis of the brain increases in this order: first,—of the delicate nerve matter of the superior brain (cerebellum), blunting the highest functions, reverence, modesty, love, etc., its reflex action is the loss of control of the connecting nerves, thus moral power fails and the lower nature is supreme; second,—the part of the brain controlling voluntary motion is paralyzed, and also that part which is said to preside over the thoughts (cerebrum), at the same time the nerves are paralyzed, resulting in an insensibility to pain and injury,—this goes on till a person is “dead drunk”; third,—the last part of the nervous system affected is that which controls the involuntary actions, breathing, etc.,—this paralysis causes death.

Continued use leads to a degeneracy of nerve matter and tissue by the constant paralysis and repair, because the structure of the nerve matter is changed, hence “disorders occasioned by the strain imposed on the system, diseases traceable to the general degeneration of the system, and diseases which might otherwise be averted or resisted;” finally the insatiable demand for alcohol, diseases of the nerves, delirium, and death.

This extra exertion of the organs tends to weaken them, which accounts for the fact you are all familiar with, namely: that when a person is taken with a serious disease and is brought to the hospital the first thing the physician or surgeon who comes to him says is, Has this person been using alcohol? Yes,—and he shakes his head. There is a question about that. That extra exertion of those organs which has been going on eliminating poison from that man makes it impossible for those organs to resist the terrible strain of a new disease. The physician says to another, Has this person used alcoholic liquors? No. Then we will try to pull him through. Those organs have not been exerted under that terrible strain. Now the effect on this nerve matter of pulling it down, paralyzing it to-day, then mending it, pulling it down, and to-morrow mending it, paralyzing it a little more the next day, and mending it again, changes the constitution of that nerve matter so that it gets into what we call a diseased condition. And there is a second reason for this terrible thirst that comes over a man. Such thirst that nothing, as he says, in heaven or earth, will stop him in getting that liquor; and why? Because of the changed condition of that nerve matter, and it looks as if there was no remedy for him. Surely it is a terrible condition for a man to reach.

Now without going further I think I have made the points that I desire. That in teaching these points we should lay the foundation on simple experiments, (with substances which are the same or similar to those of the human body, performed by the pupils themselves. That I say should be the foundation. Then we should apply these facts and explain the action on the human body. This may be supplemented by reading, not from one book but from many books, of the effects, which cannot be shown by simple experiments but which are the result of difficult scientific experiments and of medical experience.

Now let me leave these thoughts with you: Teach very carefully out of a full knowledge of the subject; discriminatingly, not with exaggeration, but for the purpose of finding the truth, the whole truth, and nothing but the truth. Teach scientifically, according to the principles of the very best science, basing the work upon experiments in the hands of the pupils. Teach impressively. As I said at first a person may know all about these facts that I have presented and yet go right on doing just the same thing as before. The lessons should be taught in such a way by the teacher as to bring conviction and decision to the minds of each one of the children. Any teacher that fails to reach that point has failed in moving the wills of the children. Teach for the sake of developing right habits and good character.

D. B. HAGAR, Massachusetts:—*Mr. President.* We have this morning received a very polite invitation from the Board of Trade of the City of Lawrence, Kansas, which I think ought to be acknowledged, and for which we ought to return our thanks. I suppose owing to the usual number of assignments, for every afternoon of this week, it will be impossible for us as a body to accept the invitation which has been so kindly extended to us. Yet I suppose a large number of individual members of the Association will be very glad to avail themselves of the invitation which has so generously been presented. I move you, Mr. President, that we acknowledge the reception of the invitation, and that the thanks of the Association be presented through our Secretary to the Board of Trade of Lawrence, for the invitation which they have so kindly given us. Unanimously carried.

An engrossed copy of Mr. Hagar's resolution was transmitted to the Board of Trade at Lawrence, Kansas, by the Secretary.

PRESIDENT CALKINS:—If it be the pleasure of the Association, the hour for adjournment having arrived, we will postpone the discussion of the papers until this evening.

The discussion was postponed. Adjourned to 8 P. M.

THIRD SESSION.

WEDNESDAY, JULY 14th, 1886, 8 P. M.

PRESIDENT CALKINS:—I regret that it is necessary to announce that the Honorable William M. Beckner of Kentucky, who was to deliver an address this evening on "Education in the South," has found it impossible to be present. His letter states that circumstances beyond his control had occurred, preventing his attendance here and that no one could regret it more than he did. I have therefore taken the liberty of transferring one of the addresses from the crowded session of Friday morning to this evening, that of "The Educational Cure of Mormonism" by A. E. Winship, late Secretary of the New West Education Commission. I now have the pleasure of introducing to you Mr. Winship of Boston, Mass.

THE EDUCATIONAL CURE OF MORMONISM.

BY REV. A. E. WINSHIP, OF BOSTON, MASS.

How can we Americanize Utah? This is one of the leading questions before the educators, statesmen, and philanthropists of the land. We are, as a nation, largely responsible for the present condition of things in that strangely cursed territory; for whatever may be said of the lack of character or lack of intellectual balance on the part of those who originated this unique combination of lust, tyranny, superstition, and faith, most of those now in the toils of that wretched system might have been prevented from entering it, or rescued from it, had the government, the philanthropist, the church, and the school, done their part promptly and efficiently.

I sat one day with a polygamous wife of a prominent Mormon, a lady who would grace any society, while she spoke with much ardor of the church and its distinctive characteristics in theory and practice. She stopped suddenly and said, "You are laughing at me." I emphatically denied it, saying I hoped I was too much of a gentleman to do it, when she replied that she did not question my courteous intention, but could see plainly by a half suppressed smile of incredulity that I not only did not believe what she said, but did not think she believed it. Seeing how plainly she read my real thought I replied, that I could not understand how one so intelligent as herself could accept such theories of life; that to us the thing was absolutely impossible. Would that you could have seen the look upon her face as with quivering lip and moistened eye she said: "But you must remember, sir, that I was born here. My mother was a polygamous wife. I married into polygamy when I was but fifteen, and had been married six years, and had given birth to children before I ever met any one to say to me that what I had been taught from the cradle was not true."

It is humiliating to think that no civilized nation was ever cursed by a vice so prosperous and impregnable, so compact and artful, so seductive and licentious, so deceitful and hypocritical, so demoraliz-

ing in home and heart as American Mormonism. America prides herself on being the modern light of the world. She flatters herself that she is modifying all the monarchical governments of earth by the illustrious example of her own success as a republic. She congratulates herself that her missionaries are civilizing and ennobling every heathen nation on earth. She should pause, however, and consider the influence of the proselyting force sent by this organized crime of Mormonism into England, Germany, Norway, Sweden, New Zealand, and the Sandwich Islands. America owes it to her fair name, to the deceived foreigners who are brought hither, to the nations we afflict with the falsely styled missionaries, to the fathers who gave us as an inheritance this land by their sacrifices, to the coming generations who must solve the problems we leave, to rid the land of every vestige of this fanatical, beastly, cruel system.

I assume that Congress, the national, executive, and judicial agencies will do all in their power for the punishment of the criminals. When we have done all that the most sanguine legalists demand, we shall have remaining the multitude of sincere, deluded women, and the greater multitude of children and young people whose fathers and relatives have been imprisoned for what the almost universal sentiment of the Territory believes to be the height of virtue. The question before the people is, how to deal with these women and children, and such of the men as are sincere, in a way to bring them into cordial, loyal relations with the government and those ideas of life that are our security and joy. What the public most needs is a clear understanding of the facts, a keen appreciation of the social and religious attitude of the people who have preempted Utah, a just estimate of their antagonism to the intelligence, home-virtue, and individual freedom which characterize our civilization.

Polygamy is not the root-evil of the system. It is the inevitable fruit of Mormonism, and possibly the least harmful result that could appear from such base theories and philosophies of life. It is an open question whether, if the teaching remains, it is safe to meddle with polygamy. To stop the practice and leave the teaching would be much like curing the scarlet fever by driving in the flush from the skin by a sudden chill. Chronic blood-poison may be the result of any serious mistake in checking the practice of polygamy.

What remedy is there for these evils? Law has its mission. Without it there is little, if any, hope of the efficient action of these remedies. Law in the statutes specifies the crimes, places a

national estimate upon wrong-doing, advertises Mormon vices to the world, arraigns Mormons as criminals, places them on the defensive side, tends to rob them of self-respect, and enervates their courage. Law executed incarcerates some, and keeps others on the threshold of the penitentiary; centralizes their best forces in legal activity; gives their missionaries the taint of fugitives from justice; crystallizes their tendency to falsehood; reveals the trickery, chicanery, and artfulness of the saints by the frequent crucial test of the witness-stand. But law cannot directly purify the system of the blood-poison. They must have different mental diet, must breathe a changed moral atmosphere, must have new inspirations before we can hope for the ultimate restoration of the life of Utah to honesty, loyalty, and purity. No law can be so good, or so well-executed, as to accomplish the desired results without the special and effective aid of the teacher, the philanthropist, and the preacher. And we fear that all the forces of education, philanthropy, and Christianity combined, cannot cure the evils or solve the problems of Mormonism without right laws effectively administered.

The great need is a clear understanding and appreciation of the conditions of Mormonism. We make a fatal mistake when we unduly emphasize the ignorance of the people. They are ignorant enough, certainly, to attract attention and cause alarm, but our chief concern is with the quality of their intelligence.

Credulity is the insanity of faith, and through its power the church deliberately and fiendishly wrecks the moral and religious life of the people.

Think of a religion that speaks of Mary, the mother of Jesus, as the favorite polygamous wife of God; which teaches that Abraham was styled the Father of the Faithful *because he was a polygamist*; that the names of the twelve sons of Jacob were written across the face of the Israelitish nation that polygamy might be inerasable; that Jesus came as the favored son of the favored wife of God to glorify Abraham, Isaac, Jacob, Moses, and David, in order to re-enthroned polygamy in the world; and that the mission of Christ failed because his disciples lacked the courage to emphasize polygamy because of Jewish prejudice.

This people cradled in superstition, nursed in fanaticism, unreached by the principles of truth and virtue, are strangely sincere in their acceptance of these religious principles.

I have heard a score of Mormon sermons, in high places and low,

and from no one thing is there more cause for apprehension than from the religious sincerity of the people. No one who has failed to hear these sermons in the rural districts shut out from Gentile interference can form any idea of the zeal of these leaders. Think of such a sermon as we listened to last December, from a young man who had an audience of thousands, almost entirely in sympathy with himself: "I stand on the threshold of the penitentiary, having been indicted for the so-called crime of polygamy. If the law is administered with as little regard to justice in the future as in the past, it is only a question of days when I shall be in the penitentiary. I'm naturally a loyal man. Such is my instinct for loyalty that I would make any personal sacrifice rather than have my name handed to the country as a disloyal subject. Such is my instinct for loyalty that I should be tempted, deep as is my affection for my families, to make such provision for them as would meet the requirements of the law, but there is a limit beyond which I cannot, will not, go. My father was a polygamist, my saintly mother now living was a polygamous wife, and when the government demands that I assume any position which says that my mother was an adulteress, then, I do not hesitate to say, at whatever personal sacrifice, 'Thus far shalt thou go and no farther.'"

As a companion to their vicious religious teaching, is a more vicious philosophy; for superstition is never so dangerous as when it has the appearance of having a philosophical basis. Their philosophy bases the practice of polygamy upon the theory of pre-existence. They teach that God is a man with an infinite number of wives, by whom he has peopled space with spirits that have existed cycles of years, practically for all eternity, having all knowledge in the abstract but no concrete experience, doomed to an eternity of unrealized longing in a state of perpetual unrest. These can only be transformed into human souls with eternal possibilities of joy, through human birth. Christ could only enter heaven through birth into human life. These spirits are everywhere present, pleading to be born. I heard an Elder say at a funeral, "If our ears were spiritually opened we could hear them pleading to be born. The highest privilege and possibility of humanity is to liberate these spirits." This was preached to a church full of people, the majority of whom were young. They make child-bearing like unto the work of Christ for humanity, and travail like unto the experience of Christ upon the cross. Their philosophy promises each wife the eternal reward

for all the children whom her husband fathers in all his households : making heaven itself the bait for hell for those women trained through superstition for fanatical zeal in a lustful life.

In 1875 I heard Orson Pratt, their great historic pulpit orator, say, in a sermon delivered to thousands of people, that Gentiles who had lived virtuous, upright, truthful lives, obedient to all the light they had received, would be admitted to heaven, but they could only be "bachelor angels serving the saints."

Our chief concern to-night is with the work of the schoolhouse. After what we have said of the character of the evils of this system it must be apparent that the remedy must be in such intelligence and faith as shall entirely eliminate fanaticism and superstition from the system.

Local public school education labors under the disadvantage of being taught and supervised by the priest-trained Mormons, of being unable to furnish enough qualified teachers, of maintaining all vicious local prejudices, of intensifying false theories by making them intellectually attractive, so that little good can be hoped for them so long as the authorities and majorities are Mormon.

Governmental education, with the control and supervision vested in agents politically appointed, has so many vicious and unattractive phases apparent that we need only to say that it is as little feasible as probable.

The philanthropic focus of the forces for the removal of Mormonism must be a school movement that shall be free to all ; with instruction as good as pedagogical science to-day can furnish ; with loyalty for the Bible that can be trusted not to bound into fanaticism ; with faith the farthest removed from superstition, with the spirit of reform at the highest key that can be relied upon to escape fanaticism ; with practical ethics supreme over theology. Any movement for the reform of Mormonism must run a careful line, lest by lack of mental balance it do more harm than good. Without sympathy little good can be done ; with too much zeal, much harm may be done. Without the Bible little good will be done with people who idolize its name ; without sublime sense in its use, much harm may follow.

The schoolhouse of the philanthropist would be the ideal, could you hope to deprive it of the vicious elements of the crank and reform fanatic, could you hope for a sustained and sustaining force behind it. Neither of these conditions is probable. The church school can succeed only as the mission element, the proselyting element, is absolutely subordinated to the educational and character-building purpose.

The New West Education commission, by universal testimony, very nearly approximates our ideal, having all the elements of the philanthropic school, laboring to educate and build up character with all the fervor and devotion of the Christian, and the constancy of support always given to great church enterprises. My invitation to appear before you to-night is doubtless due to the fact that I have been for three years Secretary of this Commission, in constant communication with teachers consecrated to this work, visiting their schools in all classes of cities and settlements in the Mormon territory. I speak, therefore, of what I have seen as experimental evidence of the success of the philosophy I have indicated. •

The aim has been to secure teachers of high literary qualifications, experts in the art of teaching, that a better education may be given to the poor than even the rich can secure in their territory. I select two phases only in their work to emphasize. The first is the way in which they use the Bible for character-building. The way in which they use the school to inculcate and emphasize the principles of patriotism, home-love, and every-day virtues. Skillful as the Mormon is in twisting the Bible to prove the correctness of his theology and philosophy, he has left it almost totally unused as a means of ennobling the character, strengthening the heart, and purifying the life. They leave the Bible an unworked mine in this direction.

Memorizing texts, poems, and extracts from orations, was one of the features of school work that attracted my attention everywhere. It did not occupy much time, but for a few minutes each morning something new, helpful in character building was memorized. The teacher had her thought not on what she liked or appreciated, but rather on what the child would enjoy and profit by, always having in mind the rhythm and melody of thought or expression. One point is worthy of special mention:—the teacher always memorizes whatever she asks them to learn, thus appreciating the labor, impressing the fact that she really values the knowledge she seeks to have them acquire through this exercise.

Patriotism, everywhere an important element in the character of youth, is specially valuable in Utah. Once at least, each week, the exercise is upon loyalty, and, avoiding all partisan shading, national events are referred to, from the news standpoint, and selections with the true ring are recited, and something assigned for a memory exercise.

The teacher has one special character text thoroughly learned and

frequently repeated each week. I visited the school and spent a half-day. At the opening of the school the teacher said, "What is our text for this week?" "Wisdom is better than rubies; and all the things that may be desired are not to be compared to it. Length of days is in her right hand, and in her left hand riches and honor. Her ways are ways of pleasantness and all her paths are peace."

When they turned to their books, she called for study texts. "Whatsoever thy hand findeth to do, do it with thy might." "Whatsoever ye do, do it heartily as unto the Lord, and not unto men." "Let us not be weary in well-doing; for in due season we shall reap if we faint not."

The recitation was introduced with the texts, "If a man strive for masteries, yet is he not crowned except he strive lawfully." "Quit you like men." "Let nothing be done through strife or vainglory." "Let another man praise thee, and not thine own mouth."

They prepared for recess with several texts: "Abstain from all appearance of evil." "He that is slow to anger is better than the mighty." "Be not overcome of evil but overcome evil with good."

Our time forbids special reference to the texts recited at the close of the school with a view to influencing their conduct on the street, their companionship in play, their attitude towards their parents, and their respect for the aged. In this way, in two years, the teacher had taught the best texts, choice stanzas, poems, etc., thus keeping their thoughts on the best things and filling their minds with the best sentiment.

The influence of such work upon an entire community, parents as well as children, fathers as well as mothers, cannot be overestimated. But the real secret of success with these teachers is the fervor which their consecration leads them to put into this work.

I would that I could give you an idea of the way in which these teachers overcome prejudice, disintegrate the loyalty which superstition and fanaticism have developed, quickening mental activity of unsuspected power, developing character, oftentimes as rare as it is stalwart. To do so, however, would require a personal introduction to almost every one of the teachers of whose work I have come to know much during the past three years.

A glimpse into one life may possibly indicate the life of many. Last Thanksgiving evening, in Salt Lake City, at a reception tendered by some of the citizens, a quiet, little lady said to me: "How do you think I spent last Thanksgiving?" To which I replied that I should

never know how she spent any day in her Arizona home. I wish you could know this teacher, could see how unlike the ideal heroine she is, delicate, gentle, with no indication of that fire which some little people show themselves to possess.

Three years ago, upon the recommendation of several people for whose judgment I have more respect than for my own, I appointed this lady to a field in one of the remote corners of the New West, without having seen her. Meeting her for the first time as she was taking her train westward, I trembled for one so unused to the world and its harshness, to launch out upon experiences so new and strange; and gladly would I have recalled her commission both for her sake and our own. But when I suggested what it meant of sacrifice, deprivation, and all that semi-missionary labor means in a new country, she looked up with a resoluteness I can never forget, as she said: "To this work I am called; for it, I'm willing to make any sacrifice; I go from no impulse, but with a purpose." I would not have dared recall her commission after I had seen her spirit and appreciated the power of fervent consecration. She went forth, alone, across the great states and territories, ending in a ride of sixty miles upon a buckboard through the barren Arizona country.

This in substance is the story she told me last Thanksgiving evening. To appreciate its power you should have seen the woman; to appreciate its effect upon me, you should know all I know of her struggles and successes in the field of which she spoke.

"One year ago yesterday, I was sitting in my schoolroom in the afternoon, having just read a group of letters from home. They had been written to reach me, to cheer me for my Thanksgiving. They gave vivid pictures of home and its surroundings, of New England life and its joys. Memory and imagination vivified them many fold until I found myself re-living a genuine holiday, around the New England table and evening fireside. I felt very queer and said to myself, 'I'm not going to be homesick, that will never do.' But I had been out there nearly two years; I had spent one such day there a year ago, and whatever may be said in praise of these Westerners, it can never be said that they appreciate a Yankee girl's sentiment about Thanksgiving. It was a settlement of nearly one-half Mormons, most of the remainder Mexicans, with a generous minority of frontiersmen, miners, and ranchmen. When the thought dawned upon me that I was in danger of being homesick I said, 'I know what the trouble is, I had a poor dinner and am faint, I'll close school early and go home for tea.'"

Then looking up with an eye full of mischief she said, "Did you ever try to eat when you were homesick? I knew then what it all meant and I burst into tears and said, 'I'll cry right through and when it's past I'll be all right.' It was a hard hour—one that I never want to live again. Memory and imagination seemed blended with stern facts and experiences, and I was genuinely homesick. Suddenly there came a knock at the door, and a neighbor called to say that a stranger was sick and going to die that night and they wished somebody might be there who could pray: and she asked if I would be willing to watch with them. 'Certainly, if I can do any good,' and I arose and went to the bedside of the dying, where for the first time in my life I stood by a human being as the spirit went to the God who gave it. When the body was prepared for burial, a few men came in and said, 'Teacher, 'tis a holiday; we don't want to lose no time and so we'll have the funeral to-day. It seems to us as though there ought to be something said, as there used to be back in the States, a service, you know. We've never had any parson here and we thought mebbe you'd have a service yourself, ma'am.' 'Why, certainly, if it will be any pleasure.' So that day I stood in the presence of those men and sang as I never sang before." I know what that means. "And when I read the Word of God there was a power in it that I never knew before; when I prayed I took hold of the throne of God; and as I spoke with them of home, hope, and heaven, there was not one of us that was not weeping. Do you know, it was the best Thanksgiving I ever had!"

I could repeat to you to-night scores of such incidents showing the tact, fervor, and devotion of these consecrated teachers.

I'm frequently asked how it is possible to win children by the hundreds from ardent Mormon homes in solid Mormon towns. Sitting in my eastern home and viewing the matter in cold blood I should say the thing was impossible, but as I stand in the schoolrooms of Utah and New Mexico, and see these teachers in their power, the wonder is no longer that they win so many, but that there is any home or any parent who can resist.

Standing before this grandest teachers' gathering of the world, in your presence, sir, representing our American metropolis, representing the teachers of America; in the presence of the leaders of the institutions of the land in which our teachers are trained; in the presence of the teachers of the East and the West, the North and the South; I am proud to be able to say from observation, as well as from philosophy,

that the schoolroom of America, with the Christian teacher upon the throne, has the power to right all wrongs in our body politic.

Let us return, each to his own field of labor, thankful that he is one of a profession, the grandeur of whose past and present is but a foretaste of a more glorious future. And let us enter upon our mission in full sympathy with every teacher in every sphere who is helping to accomplish America's purification and the world's redemption.

PRESIDENT CALKINS :—I am sure this audience would not forgive me, after listening to the eloquent remarks we have heard to-night, if I should prolong the exercises. Therefore we will adjourn.

FOURTH SESSION.

THURSDAY, JULY 15, 1886, A. M.

Meeting called to order by President Calkins.

Rev. Dr. McChesney of Topeka, opened with prayer.

PRESIDENT CALKINS :—We will now hear a report from the Committee appointed by the Board of Directors, in relation to amendments of the Constitution of this Association. The report will be presented by the Chairman of that Committee, the Hon. E. E. White of Ohio.

MR. WHITE :—I am requested by the Board of Directors to submit to the Association a series of amendments to the Constitution; and I desire to give a few words of explanation. This Association, for several years past, has appointed three trustees to take charge of its permanent fund. The permanent fund of the Association has increased from year to year until now we have several thousand dollars, beside a large number of Volumes of Proceedings of the different years. It is important that this fund and this property be entrusted to a Board of Trustees who may be held responsible for its investment and care. Steps were taken by the officers of the Association last February, to provide an act for the incorporation of this Association, under the laws of the District of Columbia. Those steps were successful, and all that is essential to complete the incorporation of this body is the adoption of the amendments recommended this morning. Permit me to say further that these amendments have been very carefully considered, and in view of the necessity of a unani-

mous vote, it is hoped that no exception will be made, unless for the very best of reasons. These amendments are necessary, in view of the organization of a Board of Trustees, as the representative of the body corporate, and in order to harmonize the present organization with the act of incorporation. The Board of Directors instructed me to submit these amendments to the Association, for its action. [The Amendments to the Constitution will be found under their proper place in the volume.]

THE CHAIRMAN:—You have heard the amendments that have been submitted, what is your pleasure in regard to this report?

A. C. BOYDEN, Massachusetts:—I move the adoption of these recommendations of the Board of Directors, by the Association.

MR. SHELDON, Massachusetts:—I second the motion.

THE CHAIRMAN:—The motion has been made and seconded. All in favor of the adoption of the amendments as read in full will please signify the same by saying Aye. Those opposed will signify it by saying No. The vote is unanimous in favor of the amendments and they are adopted.

MORAL TRAINING IN THE PUBLIC SCHOOL.

BY E. E. WHITE, LL. D., CINCINNATI, OHIO.

The highest efficiency of the public school is tested by its results in moral character, and hence its central aim is effective moral training. The truth of these statements will be questioned by no one who has carefully considered the functions and value of public education. The assumption that intellectual training is the sole duty of the public school is made as an objection to the system, and never as a ground of its defence. It is always urged as proof that public education has no sufficient foundation on which to stand, and no imperative claim to public support; and whatever tends to secure for this assumption popular favor threatens the integrity of the school system.

The fact that moral character is the highest end of school training raises two important questions; to wit, (1) *By what means can this end best be reached?* and (2) *To what extent can the public school use these means?*

PRINCIPLES.

Every normal act of the soul, intellectual or moral, leaves, as its enduring result, an increased power to act, and a tendency to act again in like manner. *Power and tendency are the abiding results of all psychical action.* The powers and tendencies which result from moral activities constitute moral character; and hence character may be defined as the total resultant of the moral activities of life. Character is not a distinctive mark, as the word implies; it is not reputation. It is an inner force and tendency. It is both a principle and a product,—a cause and an effect.

It follows that moral character is primarily formed or cultivated by moral activity, and that the nature of this producing activity determines the nature of the resulting character. This brings us to the question, "What is a moral act?"

One of the most obvious phenomena of our conscious experience is the fact that the feelings are the solicitors and prompters of action; but it is an equally obvious fact that the feelings do not de-

termine or necessitate action. We are as conscious of the power to resist our desires and impulses as we are of their solicitations; and hence we feel a sense of guilt when we permit a wrong desire to pass over into a purpose or out into a deed, or when we consciously cherish or harbor it.

So far as we are able to interpret the actions of brute animals, they are necessitated by their feelings, and especially by their bodily feelings,—their sensations, appetites, and instincts; and it is for this reason that the actions of brutes have no moral quality. But man is endowed with the power to act in accordance with soliciting desires, or to resist and reject their appeals;—this free, self-active power of the human soul being called the *will*. By an act of the will the soul can not only resist a clamorous impulse, but, by directing the mind's attention to other objects, it can wholly supplant it. "Appetite," says Hooker, "is the will's solicitor, but the will is the appetite's controller;" and what is true of the appetites is true of all the impulses of the sensibility. By an abiding and controlling purpose, the soul may subject all its lower feelings to the higher, and even to a moral principle. The forming of such a supreme purpose has been to many a man the beginning of a new moral life.

If man were endowed only with the power to feel and to know, all of his actions would be determined by the strongest impulses at the time; and these would be necessitated by conditions over which he would have no control. This would relieve man of all moral responsibility for his actions; and, as a consequence, human conduct would have no more moral quality than the actions of brutes. It is the power and freedom of the soul in willing that makes man responsible for his conduct, and hence a moral being. We thus reach the important truth, that *it is the voluntary or will element in human action, that gives it moral character*; and further analysis would show that character is eminently *a state of will*. It may be added that the will is not only the soul's autocrat in moral action, but it is largely the director of all the conscious activities of the mind. "The normal man," says Schopenhauer, "is two-thirds will."

But let us see a little more clearly the relation of the intellect, the sensibility, and the will in moral action. This relation is partially indicated by the statement, that choices and purposes are occasioned by feelings, and that feelings, the bodily feelings excepted, are awakened by knowledge. In the marvelous interaction of the soul's powers, intellectual activity awakens emotions and affections,

which pass over into desires; and these make their appeals to the will. It is thus seen that all three of the great powers of the soul are conjoined in conduct, which Matthew Arnold says is "three-fourths of life"; but the final determining power in this trinity of powers is the will. "Motives," says Porter, "impel the will, but they do not compel it."

If the will be the determiner of conduct, what constitutes the rightness or wrongness of an act of will? For our present purpose, it is not necessary to inquire for the ultimate basis of right and wrong. It may be assumed that this moral distinction and its basis are alike real; and it will suffice to say that an act is right when it conforms *to what ought to be*,—the imperative *ought* being the test of moral obligation.

THE TRAINING OF THE WILL.

It follows from the above truths that effective moral training involves *the right training of the will*; and this touches the very root of the question of method, which we are now to consider.

The fact that the act-impelling desires are awakened by knowledge shows that *instruction* in duty has a vital relation to the training of the will, and hence to moral training; and this is a sufficient answer to all the recent cavil respecting the relation of instruction to effective moral training. Nor is it sufficient that such instruction arouse the feelings, and, to this end, be concrete and illustrative. It should increasingly lift duty and obligation to the domain of the higher motives of reason and conscience,—to the plane of *moral principle*. It should be both incidental and regular, and its ends should be intelligently apprehended and systematically pursued and attained.

The determining relation of the will to moral action shows that the culture of the feelings is a means, and not an end, of moral education. Vital moral training can not end with emotions or desires; it must issue in right action. It is true that the feelings furnish impelling motives, and are otherwise important conditions of moral action; but they result in moral character only when they have their issue in an act of the will. The soul may, for example, be swept with emotions of pity, compassion, and sympathy; but if these feelings do not pass into a purpose or out into a deed, they will develop character very little. On the contrary, the indulgence of excessive feeling without action enfeebles the will and makes the character limp and flaccid. It is for this reason that the theatre has

never been a very effective school of morals. It is not the men and women who shed most tears over spectacular wrongs that are the most ready, and heroic in effort to right the wrongs in actual life.

Effective moral training involves the *discipline of the will to act habitually in view of those motives which release the soul from bondage to low and selfish desires, and make the conscience regal in the life.* The vital importance of this training in school is emphasized by the fact that, while school-life affords excellent opportunities for it, both the instruction and the discipline of the school may actually enfeeble and dissipate will-power. Diligence in study and outward obedience may both be secured by means that practically divorce conduct and right motive. It is easy to hedge in a child's conduct by authoritative restraints, and to urge him forward by artificial incitements; but when the restraining hedge is broken down, and the temporary incitement is wanting, then will appear the vital need of the power and habit of self-impulsion and self-guidance. The most dangerous transition in a youth's life is that which carries him from the authoritative control of the family and the school to the responsibility of untried liberty. The shores of this perilous strait of human life are strewn with wrecked manhood.

The home-life and the school-life of the child should prepare him for this transition to freedom by effective training in self-control and self-guidance, and, to this end, the will must be disciplined by an increasing use of motives that quicken the sense of right and make the conscience regal in conduct. It is not enough that the teacher secures diligence in study, good order, and proper behavior in school. The vital question is, *To what motives does he appeal in gaining these ends?* If these be low and selfish, the results, howsoever fair in appearance, will be like the apples of Sodom in the life. No temporary interest in study, no external propriety of conduct, can compensate for the habitual subjection of the will to the dominancy of the lower motives. The pregnant truth is that no training of the will can stand the supreme test of conduct that does not put its acts in harmony with the imperative OUGHT,—the last word in the vocabulary of reason and duty.

SCHOOL INCENTIVES.

The above facts throw a flood of light on the question of *school incentives*,—the central element in will-training.

The most obvious classification of school incentives is their division into *artificial* and *natural* incentives.

Artificial incentives are those rewards or incitants which are thrust between the pupil and the natural consequences of study and conduct, and thus become the immediate ends of effort. They include such incentives as,—

1. *Prizes*,—as books, medals, merit tickets, etc.
2. *Privileges*,—as holidays, early dismissals from school, choice of seats, positions as monitors, etc.
3. *Immunities*,—as exemptions from duty, tasks, etc.

These are the lowest incentives ordinarily used in the school, the propulsive or fear motives possibly excepted; but experience shows that they do not lack power. They may be so incorporated into the discipline of a school, and so intensified, as to become its very life,—the all-absorbing end of desire and effort. Many a school has been wrought up to a high pitch of interest and effort by the enthusiastic use of the reward of a monthly holiday for the attainment of a given standing in study, deportment, punctuality, and regularity. It seems unnecessary to add that these artificial incentives do not stand the decisive test of character. They may stimulate effort, but they bring the will into captivity to the present and selfish, and feed the moral nature on husks.

Natural incentives are those motives that attend effort and attainment as a natural result or consequence. They range from the more or less selfish to those high motives that beckon the soul to duty, and stir it “with the joy of pure obligation,”—the highest joy of life. They spring up in the pathway of duty, and are the appointed attendants on human effort through life.

From the long catalogue of natural incentives, let us select the seven most used in school,—the “Royal Seven,” as they may be called. These are :

1. *A desire for standing or rank, including the desire to excel.*
2. *A desire for approbation,—of equals and superiors.*
3. *A desire for activity and power.*
4. *A desire for knowledge.*
5. *The hope of future good.*
6. *A sense of honor.*
7. *A sense of duty.*

A glance at these seven incentives will suffice to show that, in their influence on the will, and hence on moral character, they rise

from the first to the seventh ; and a little reflection will show that each of them has higher and lower phases.

The desire for standing may be readily lowered, even to an artificial incentive, as is always the case when the sign of rank is made the absorbing end of effort. In too many schools the desire for a high class mark or a high "per cent" in examination is the ruling passion of the more ambitious pupils. They cram for per cents and they sometimes cheat for per cents ; and this, unfortunately, is not confined to elementary schools.

The desire for approbation becomes, in its lower phase, a craving for unmerited praise or flattery ; while its higher phase includes a desire for the approval of the wise and good, and, still higher, for self-approval, which Porter calls "the most blessed of joys."

The desire for activity and power may have its roots in the coveting of self-glory ; or it may spring from a noble desire to honor one's powers, and realize that sense of efficiency which is one of the deepest springs of human action.

The desire for knowledge may be a mere craving of the personal advantages which the possession of knowledge gives ; or it may be a pure and inspiring love of truth for her own sake.

The hope of future good may be purely selfish, or it may be inspired by a noble self-interest and a benevolent desire to help and bless others.

A sense of honor may be false or true,— the former being a servile bondage to the opinions or demands of schoolmates, a clique, or a party ; and the latter, that fine sense of justice that is born of self-respect and a true regard for the good-will of others.

It is to be specially noted that each of these natural incentives has for its highest correlate a *religious motive*. A desire for approbation has for its religious correlate *a desire for God's approval* ; a desire for activity and power, *the desire for the power of an endless life* ; a desire for knowledge, *the desire to know God and his will* ; the hope of future good, *the hope of a blessed immortality* ; a sense of honor, *the desire to honor one's creator* ; a sense of duty, *a sense of obligation to do God's will*.

It has been assumed in this discussion that the right training of the will involves the use of the *highest* motives that can be made effective ; and hence of two motives equally effective, the higher should always be placed before the pupil. In accordance with this principle, the artificial incentives should be used, if used at all, as

temporary expedients to lift a pupil or school to the plane of the natural incentives. Such incentives may properly be used in controlling a school of savages; but as fast as the savage nature is overcome, higher incentives should be substituted.

The same principle is to be observed in the use of the natural incentives. They are not equally abiding in results, or equally valuable in quickening the pupil's sense of right and duty; and hence there should be an increasing use of the higher and more fruitful. The use of lower incentives, when those that are higher can be made equally effective, is to sacrifice the best results of will-training. It follows that the most efficient training of the will involves an appeal to the religious motives; and this inference is strongly supported by the fact, that *the religious motives quicken and energize all the lower motives to which they are related*. It is for this reason, among others, that they have been the mightiest of historic forces, and the mightiest forces in individual life. The religious motives are fibred in modern civilization, and constitute the one authoritative element of the moral law. There has never been a moral code that secured the free obedience of men, that did not derive its highest and most restraining authority from religion; and this is true in pagan as well as in Christian lands. The much-praised moral code of Confucius not only contains references to "Heaven" and the Supreme Being, but it clearly recognizes a future life; and, besides, it is an historic fact that the influence of the Confucian precepts on Chinese life has increased in the ratio in which the great teacher has been venerated as divine. It is an equally suggestive fact of history, that the decay of faith in Greek mythology was attended by a decline in Greek morality, such as it was.

Indeed I know no thoughtful writer who denies that religious sanctions have a greater and more essential influence on the will than any other motives. "My belief is," says Mr. Huxley, "that no human being, and no society composed of human beings, ever did or ever will come to much, unless their conduct be governed and guided by the love of some ethical ideal;"* and he further expressly declares that the religious feeling is "the essential basis of conduct." Carlyle is still more emphatic respecting the influence of religion on the life; and even Herbert Spencer confesses that he wrote his *Data of Ethics* mainly because of his belief that "the moral injunctions are losing the authority given by their supposed

* From address to London School Board.

sacred origin." Even more emphatic testimony, to the same effect, from other eminent scientists and philosophers, might be cited.

This principle is forcibly illustrated in the training of the will *through obedience to authority*,—an essential element in its complete discipline. The child first meets authority in the will of the parent, and obedience to parental authority is the beginning of the process of subjecting feeling and impulse to a higher law. The parent's authority represents both love and power, and the child's obedience has its abiding spring in *reverence*, which Coleridge calls "the synthesis of love and fear." This gives the parent's will ascendancy over both the heart and will of the child, and imparts to it a touch of the Absolute. Some one has said that the first deities which a child worships and obeys are his parents.

This discipline of the will in obedience is next taken up by the school, whose authority is both personal and institutional. Here the pupil is not only trained in obedience to authority in this new form, but is prepared for obedience to civil or governmental authority, which is institutional, and not personal. To this end, both the authority of the school and of the state should be enthroned in the pupil's reverence; and this can only be secured by training the will under a deep sense of that Supreme Authority that is back of family, school, and state. We must not be too slow to learn that an essential condition of willing obedience to law is *a reverence for its authority*, and that this involves a reverence *for its source*. Human law has surest and easiest ascendancy over the heart and the will when it speaks, not simply by the authority of the people, but also in the name of the King of kings.

It is believed that history will fully sustain the statement, that every wide attempt to ground moral obligation solely on human authority has resulted in the weakening of the conscience, the enfeebling of the will, and the lowering of the moral life of the people. It may be true that a basis of right and wrong can be found in man's moral nature; but the pregnant fact of human experience is that their authority over the will is weak when unsupported by religious sanctions and influence. In the murky atmosphere of carnal and selfish appetites and desires, moral distinctions become obscure and confused. Virtue comes to be regarded as mere self-restraint; temperance, as moral cowardice; and theft, as the secret redistribution of wrong accumulations. This is sad history.

The deep truth of both reason and human experience is, that the

religious motives transcend all others in their influence on the will. It is the high sense of obligation which they alone furnish, that can free the will from self-bondage to the lower impulses and desires, and make its high purposes imperative and abiding in conduct.

In the clear light of these truths, I cannot avoid the conclusion that effective moral training in school demands the vitalizing influence of religious truth and sanctions; and I can not suppress the fear that any system of moral training that ignores the Supreme Source of right and duty, that shuts out from obligation all ideas of God and immortality, will not bear the test of character and life.

Take as an illustration the effect on the will that would result were all consciousness of God's omniscience excluded from school-training as a motive. What a help and inspiration to a wayward pupil is the consciousness that the eye of a loving and just teacher rests upon him! What courage and heroism in battle have been inspired by the eye of the great soldier in command! What an incentive to right conduct, and what a restraint to wrong-doing, is the eye of the wise and good! Evil doing hides from sight. Men love darkness rather than light not only because, but when their deeds are evil. These are but weak illustrations of the inspiring and restraining influence on human conduct that flows from a clear consciousness that there is in this universe an *All-seeing Eye* that is never closed; that He who has said, with infinite authority, "Thou shalt not," *sees!* There is no such vanquisher of temptation as the consciousness, "Thou, God, seest me!" The exclusion of all thought of that Omniscient Eye from school-training would be like shutting out the light of the sun and substituting the glimmer of candles!

The consideration of one more question is necessary to complete this discussion; viz., *To what extent can religious motives and influence be used in the public school?* And here it will be assumed, that if effective moral training be the central duty of the public school, *whatever is an essential means to such training* should have due place in its instruction and discipline.

There are two extreme and opposite views on the relation of religion to moral training in the public school. The one asserts that public school training must be completely divorced from religion,—it being assumed that the denial of the right of the public school to give sectarian religious instruction shuts out all religious truth and sanctions. The other extreme view claims that formal religious in-

struction must be made the basis of all moral training,—it being assumed, that the absence of the catechism and other technical instruction in religion from the school necessitates the absence of all vital religious influence.

The truths which we have considered clearly indicate that there is a *practical mean* between these two extreme views. They show that what is needed to give efficiency to moral training in school is not formal religious instruction so much as the quickening of the conscience and the influencing of the will by the wise use of religious motives and sanctions. When a witness appears in court to give testimony, he is not formally instructed in religious doctrines, but his conscience is quickened and its authority reinforced by an oath that appeals to the Omniscient Searcher of hearts and the Supreme Source of truth and obligation. A similar, but less formal, use of the common sanctions of religion is needed to quicken the moral sense and reinforce the lower motives in the moral training of the young; and whatever may be true of the necessity of the religious oath in the administration of justice, there can be no question respecting the importance of religious sanctions and motives in school training. In view of the imperative need of the most vital moral training possible in our schools, this necessary use of religious influence should receive universal approval.

The writer is aware that theoretical objections can be urged against the practicability of the "golden mean" above suggested; but, happily, there is no such difficulty or confusion in the *practice* of thousands of teachers. The great majority of American schools are religious without being sectarian; and it is high time that this fact was more universally recognized. It is doubtless true that the most impressive forms of presenting religious sanctions to the mind and heart of the young are prayer, silent or spoken, and the reverent reading of the Bible, especially those portions that present human duty in its relations to the Divine Will,—forms still permitted and widely used in four-fifths of American schools. I share Mr. Huxley's serious perplexity in seeing how the needed measure of religious influence in our schools can be secured without the presence of a Bible; and yet, to this end, its formal and stated reading may not be essential, since there are other ways in which its vitalizing truths may be brought home to the conscience and the life.

At least three avenues are open for the introduction of religious ideas and sanctions into all our schools. These are sacred song, the literature of Christendom, and, best of all, faithful and fearless Christian teachers, the living epistles of the Truth. Against these there is no law.

PRESIDENT CALKINS :—The paper just read is now open for discussion.

DR. ANDREWS of Marietta College, Marietta, Ohio.

Ladies and Gentlemen :—I fear very much to say anything, lest I should mar the impression that has been produced by the paper we have just heard. I do not believe we have ever had presented to us more clearly the ground of moral training, and never has the ground been covered more completely. I wish simply to express the impression that it has made upon my mind, in regard to the work of the teachers. I think, my friends, that it has shown to us the dignity and the responsibility of the teacher's work which no sophistry can overthrow. I do not see how a man or a woman conscientiously can overlook this great moral element in teaching. It would seem as though every right-minded man or woman would shrink back from entering the schoolroom where it is excluded. We should be honest in all things, in our business work, in buying or selling, but when we go into the schoolroom there we no longer deal with matter but we deal with the human mind and every day's work of the teacher leaves its impression. Now this subject has been lifted up from all the petty details of whether we shall teach morals from a book or not. It is made clear to us, that every man and every woman is doing a work in the line of morals every day, whether that work is positive or negative. You are either building up your pupils in their moral life and character, or you are deteriorating that character. Allow me, Mr. President, to say one other word, and that is that I never was struck so forcibly before with the need of the moral sentiment. You all know, my friends, that the weak point, and point which cannot be remedied, is that weak point in our public system by which we are liable to get bad men as school directors. Now, sir, if the directors of schools in this country should have this principle which has been here presented and should be actuated by anything like this idea of moral influence, we should have many things different from what they are. It is too often the case that a Board of Education act as though they were clothed with power which they had a right to exercise exactly as they choose, without responsibility to man or to God ; and so they do things which should be regarded as disgraceful. Of course, in many places we have the very best men, but unfortunately we are liable to have the others, and so the best teachers in

the country often have their heads cut off without any reason and no notice given. One word more, sir, in regard to the religious element,—and I am very glad it was so strongly put,—I believe every word that has been said as to that. I believe that every man—every Christian man—ought to feel his dependence on God. If you will allow me, Mr. President, and I hope I may be pardoned for the egotism, although I never said it before in public, when I was a sophomore in college, long before I had reached my majority, I was obliged to go out and teach in an academy. The question came up to me, Shall I have prayer in my school? I was a member of no church. I had never sought admission to a Christian community. But thinking it over I could not see how I could go before my pupils without asking God's blessing upon our daily work; and so the first school that I taught, I opened with prayer, and three years, at least, before I became a communicant of the Christian church; and though my teaching years have now passed fifty, I am glad to say that I never regretted that act.

PROF. D. W. STERN, Madison, Wisconsin.

Mr. President:—I have listened with very great interest and appreciation to the admirable paper which has been presented to us and have felt a profound sympathy with almost all that has been uttered. Now when one holds the views which I have on this subject, he is liable to be misunderstood by those to whom he speaks, and to stand as in the light of one who would oppose religious influence in the schools. Therefore in the beginning I wish distinctly to express my sympathy with most of what has been said upon that subject, as well as the rest. But it seems to me that we are here discussing a question of philosophy. A radical question which brings with it certain conclusions which we must accept or reject, according as we accept or reject the doctrine. Now I heartily agree with the assertion of the paper that there are in the schools moral sanctions which are not religious,—they have grown up out of human experience of the vast body of moral teachers,—which rest not upon authority but upon the hopes of human life as society itself is organized, and all those interests which we hold most dear could not exist for a moment if these sanctions were broken down. To recognize these sanctions, therefore, in their full power, in youth, in early life, seems to me to be the most important matter of moral education. I would have the school teacher put forward every means under his authority to effect that moral teaching. This rests in the experience of centuries and not upon any system of belief or dogma. I am satisfied, further, that these moral principles receive further support and help by religious inspirations. That man who has back of him a sense of the presence of the Deity and of responsibility to him for what he does, is in my mind unquestionably

more firmly planted in his moral conviction, because of it. He will stand more strongly in the day of trial. Let not what I have to say seem to be a denial of all this. But, my friend, we have before us a system of public schools built for a great and diversified public, in which all stages of belief and disbelief exist, side by side. As rational men we prize this diversity of opinion, believing all of us that the truth always will stand of its own weight and does not require our supporting arm to help it live. Because of that conviction we give free utterance to all men and desire to protect all men in the exercise of free thought. Now there can be no one who does not recognize the fact that a large portion of our community does not favor anything approaching a religious teaching in the school; and of the portion which does, a part will insist that the religious teaching shall take such and such a definite form, and another part will insist that it shall take other forms. In short, if our public school is to exist for the whole people, it must be made of such a character, in this respect, that it will not divide us into factions but unite us all about it. The moment we start out with the affirmation that our moral teaching in the schools must rest upon religion—and I say this realizing to the full extent how vague that word “religion” is—but the moment we say that our moral teaching must rest essentially and fundamentally upon religious precepts, we make it essentially a part of our public law, and as a logical consequence, that religion shall be taught in the schools. And we may explain that word as carefully as we will, it will be practicably impossible for us to stand upon this platform, without very soon dividing ourselves into factions and warring with one another. The war will spring out of that which is deepest and strongest in us; and prudence warns us that we must keep off that ground. More than that, all will admit that religion, like morality, has its greatest intensity when it flows, not merely from the lips, but from the heart. A religious man or a religious woman carries that power of religion into the schoolroom and, though his lips be sealed upon the subject, it is a love manifesting itself day by day and shedding its power into the hearts of all those who witness it. Against such an act as that, against such a life as that, Catholic, Protestant, Jew, Pagan, and rationalist, none will raise a voice or a finger. And so far as we have Christian teachers who can thus give out the Christian life, they have my hearty support. But on the other hand we have no religious test and we cannot have one. To insist that those teachers who are irreligious or those teachers who are rationalists, or those teachers that belong to some peculiar creed which insists upon its distinctive forms of belief, shall step forward and proclaim, and manifest in the management of their schools, religion as the basis of all their moral teaching, is insisting that we substitute hypocrisy for truthfulness. Now then let us look at this thing as a matter of plain

common sense. There is existing, and there will exist, in my belief, always, agencies besides the public schools, to whom is entrusted this very sacred duty of raising the child above this life to the life to come, above this temporal responsibility to the higher one. There is the family. And, my friends, we often talk of the school as though it took the place of the family. Never! Never may it do that. What we need most of all at the present time is a strong conviction on the part of parents that responsibility for the moral outcome of the lives of their children rests, not with such public agencies as the school, but with them. And we shall do no better service, as teachers and citizens, than by enforcing this belief and disclaiming any responsibility beyond that which justly pertains to us. In addition to all this there is the Christian church where every man finds his peculiar form of belief; and I am one of those who think that no religion is possible save as it clusters about these forms of belief. We have seen, I know, a great body of religious believers spring up, who have not had a distinctive system or doctrine to which they hold with firmness, and out of which springs their religious life, upon which it rests, and the shattering of which shatters all the strongest convictions of life. Now the churches can teach religion upon this strong basis. They are created for it, they are sustained for it; but let them be relegated to that. Let not our schools be irreligious; let them not be religious. Let them be an agency created by society for certain definite and well-defined ends. Not assuming to do all for the children, but assuming to do only a certain fundamental work and studying to do that well. My own conviction is firm that those teachers who truly realize that morality rests, first and foremost, upon human experience and then only further receives a higher impulse from religion, that they will prepare our children to stand that coming tide of question and doubt, which all of us know is before us, with which the atmosphere of the East is pervaded at present, the outcome of which we cannot predict, and stand in the face of this, and not yield family and morality, upon which society and all our interests rest.

DR. J. B. PEASLEE of Cincinnati, Ohio.

There is a feeling among a great body of teachers where the use of the Bible has been discontinued, or in schools like those where the Bible was never used, that thereby there can be no appeal to our duties to God. That thereby nothing from the Bible can be used. I wish just for a moment to state, that that is not true. As Dr. White said, we can find from literature, from our Christian literature, precepts that will take the place everywhere, of this instruction. Now no Board of Education has ever said, to my knowledge, that God and our responsibility to the Deity should not be taught in the public school. If the selection can be

made from literature, such for instance as the one "We thank the Lord for early light," or "we may see God in the fold of the flower," or we may take a lesson from Whittier's "Immortality of the Soul," this can be taught in the public school. And more than that, the pupil can be taught in the public school extracts from the Bible. The Bible alone need not be used; we can take things as they are. The Bible will not be used; in many of the large cities of our western states, it has been put at a distance. We must then take the condition of things as they exist, and I say to you that it can be put back, for no Board of Education who has ever dared to say that the Bible was the only book from which we could make a selection. We can go to the Koran if we wish. Extracts can be taken from it. Even in the system of schools where the Bible as such is not in use, I have never heard any objections to this plan. In Cincinnati this has been true, and is true, and I never heard any objections made. There are extracts in our readers from the Bible and no one to my knowledge has ever made any serious objection—at least in Cincinnati—to that. It is to the Bible as the Bible, and not to the use of the book in making selections from it. So we can take it and we can use these selections; and I believe the best way for moral instruction, the best plan, is this: Let the teacher, Monday morning, place upon the blackboard some grand thought; take this one, "God hath a presence that you may see in the fold of the flower and leaf of the tree," and make that a subject of the morning exercises. Another week impress upon the pupils of the public schools the sentiment contained in the extract and then let them memorize the extract and thus fix the thought in their minds. I believe it is a great deal better to take a selection from the Bible and place that upon the blackboard; but if the Bible is not in use, simply take it as a selection from literature and place it upon the blackboard, and then make this the text for talks, and then have the children memorize the selection. I believe that is altogether better than perfunctory reading of the Bible. When the Bible was read in the Cincinnati public schools, there was a rule which declared that teachers should make no comment. It was read by teachers. It is much easier to take an extract and teach it that way, even in schools where the Bible is not used, and I believe it is the best way to teach it. You heard a lecture here last night concerning instruction given in mission schools in Utah. That teacher is exactly right in my opinion. She had a text applying to bad conduct and when a child misbehaved, she called for this text, which was recited, and this left the influence of the text impressed upon the mind of the child. I believe it is a better way than a simple reading of the Bible; that is not enough. Our best literature is full of grand and noble thoughts, which, if impressed upon the child, will make the pupils grow up into better men and women. I believe we

should make such selections as will appeal to God. As I stated before, I know of no objection ever being made in this country to such use of God's Word. The religious responsibility in that line, all can understand. If we define religion in the schools, any way we may define it, thousands of people, and conscientious people, object to it, but then it is the definition and not the fundamental truth. We have the right to appeal to the Deity, and I am firm in the belief that no objection would be made to that. I thank you for your attention.

PROF. WIENER, of Kansas City, Missouri.

The paper we have listened to was on moral training in the public schools, and I intend to discuss that paper as it was read. I noticed that Dr. White laid down a certain course for moral training in the public schools. The first part is this, that the will is the basis of all morality. I was happy enough to write down a few of the remarks made. One of them was, "It is the power and freedom of the soul in willing that makes man responsible for his conduct and hence a moral being," and then that "character is eminently a state of the will," and that the "normal man is two-thirds will," and so on. This last remark I believe is by Shopenhauer. I want to say upon this point that in these remarks we see plainly that the will of the individual man is made the basis of morality; and as Shopenhauer has been quoted, you will allow me to make a few remarks, as to how Shopenhauer looks upon the will as underlying morality. He was a pessimist. He regarded the will as a possession of the individual and that man can arrange all his action according to that, and when the will is not the basis of morality, it reduces the man to a lower being. In every case, Shopenhauer makes the will as an independent actor of man.

The next remark was that "moral training means a training of the will." That the will is supplemental to the moral training and the culture of the feeling the chief and final means of moral training. And then at last comes the reverse of the whole matter. The reverse is this. After it had been stated again and again that the development of the will must underlie our moral training it is said that, as I have it, "authority is to underlie the moral training." And after it is said that the love of honor or emulation and whatever else it may be is to underlie the moral training in schools, it was said that each of these natural motives has for its correlative a religious motive; that religion is to be the basis of moral training, whatever that religion may be. I only want to speak here of the points as they were mentioned. It was said that even in such a moral religion as the Chinese had, by Confucius, that it often made mention of Heaven. I remember only two places in which Heaven was mentioned in the Confucius precepts. In one place the people ask Confucius, and his

disciple asked him, "Master, what do you think of after life? what do you think of Heaven?" Thereupon Confucius answered, "What a foolish question you ask. I do not know enough of this life and you ask me of the larger." I think religion and morality go side by side. I say that every man has the right to express his religious feelings. Every man has the right to believe as he pleases, but no man has a right to impress his belief on another. In the second place religion is a very broad matter. If it is an inspiration, it comes by intuition; it comes by early training in the family; it comes by training of the mothers; it comes by attendance at the church; but it will not come by the training of the school-master. Morality will, there is no doubt about that. If the Bible is to be taught in the public schools, to which I surely have no objection, I would only ask the question why the objection to Shakespeare and the other poets? But remember I have no objection to the Bible being read constantly out of the school. Then again it has repeatedly been said that non-sectarianism should be taught; only the cardinal points of religion. I do not know how many sects there are represented here in this assembly, but I venture to say that you will not find one single sect which will agree in their idea of what God is. I repeat it; a man may be exceedingly religious in his private life, but I am speaking simply for freedom in the schools, as I believe a strong religious sentiment may be a very dangerous matter. I think I have read history as carefully as anybody and I think that religion is not connected by morality; by which I mean, not that it is against morality, but that morality goes side by side with religion. Religion is intuition; religion is inspiration; morality is a training of the mind of the man and the best that is in him. I thank you for your attention.

WM. BAKER, of Newburg, Kansas.

Mr. President, Ladies and Gentlemen:—I believe you all wish morality to be taught in the public schools. I do not think there is an individual here but what wishes that socialism may be banished from the land. You all wish nihilism annihilated from this fair country of ours.

I tell you, ladies and gentlemen, that it is the absence of morality that breeds socialism. It is the want of morality that makes our men and women disobey the law, and so destroy the power of the state. Now you all agree that morality is to be taught, but where is your standard? If I teach in the schoolroom that three feet make a yard, and one argumentative child says, "My teacher last season taught that two feet make a yard," what is the teacher to apply to? Why, he sends to Washington and gets the standard, and then the child is satisfied. And so with regard to morality—you must have your standard. What are you going to say to the child who comes and says such and such a boy "took twelve

eggs from a nest in the next yard. Is that right?" You say no. But the child says, "Our teacher last winter said if there were plenty of eggs in the nest we might take nine or ten." Now, ladies and gentlemen, I want the standard to go by in such matters—the rules and standard of measurement for such cases.

Another child says, "Teacher, Bobby gave me one knife and took two; is that fair?—is that just? My two knives were worth two dollars, his knife worth but one dollar." I tell him no, that is wrong; but the child replies that the teacher before me said it was right, because it was a "sharp trade." Now what does he mean by a "sharp trade"? Why, it is the kind of morality which has come and flourished in the western states; but I cannot call it morality.

But, ladies and gentlemen, that is no subject to trifle with. I wish to put the matter clearly. This question of morality is to be the salvation or the ruin of the present great United States. If you are going to keep the states together, if you desire to hold the people to support the law, if you want children obedient to parents, if you wish to prevent the boys from breaking up the desks in the schoolhouse, if you desire all that, and hope to accomplish the most good, you must have a moral guide. And, again I ask you, where is your standard?

I ask that gentleman who just spoke on this platform where, will he find his guide for morality? Let us go to the Chinese and ask for their moral standard. Do not despise the Chinese,—they are as clever as many of us here. What is the Chinese moral standard? Why, the mother who has too many little girls buries them in the soil out of sight. Is that real morality? Is that the morality of the United States which is an example for all nations? Refer back to Greece and Rome, what was their morality? What did they know about morality? Yet the western states with their "sharp trade" may come to that sort of morality by and by. Go back and read the history of the French revolution. Read about Robespierre and his associates. What was their morality? Now I come to the question I began with; all history leads us to this: What is the standard of morality in any nation? I say if you banish the Bible from the schools, you have no standard of morality or that which determines right and wrong.

H. F. KEALING, of Texas.

I always feel on approaching the question of moral training, that the saying is applicable, "Take the shoes from off thy feet for the ground on which thou standest is holy ground." I have listened to the discussion of this question with great interest, not exceeded by that of any one in this vast audience. First, because I am a teacher belonging to the great body of teachers in this nation. Second, because I am a teacher of a class of

beings who more especially than any other class of individuals in this great republic, need moral education; and to me, sir, it is a question of vital importance whether morality as laid down in the Bible shall be taught in the public schools or not. To me, the abstract phases of this question are not so important. I cannot, sir, on the spur of the moment take up the great truths which the gentleman has laid down in his paper; but the practical side of this question is that upon which I wish to speak. Now one gentleman took the position that we ought to teach the truths expressed in our best modern thought, by Whittier and other poets. I ask the question, if we are to teach all that is laid down in the Bible, if we are to teach the morality which the Bible is the great teacher of, why should we take a source such as Whittier, when we have the higher source, which is Whittier's God? I ask why should we seek to avoid this question? Why should we make concessions to those persons who wish to rule out the Bible. As the great American people we are a Christian nation and the Bible is the foundation of our religious system. It contains the purest morality that the world has ever seen, and I believe it cannot be improved. Therefore I say let us go to the source where the waters are cool and pure and sweet, and not stop along the banks of depraved human nature, and there drink from the fountain of the poets. Gentlemen, the Bible ought to be taught. Some one said that there is no doctrine, no principle laid down in the Bible upon which all men are agreed. I admit that there is no doctrine, no principle laid down, concerning anything in this world upon which all men are agreed. In this assembly alone, every man does not even agree in his pronouncement of "recess." Shall we pander to the minority, to the rational element, to the element which plunged France in blood, to the element which has done so much harm to civilized countries, to the element which is abroad among us to-day,—socialism and anarchy? Shall we pander to a minority against the vast majority? The preponderating element of these people cry for God and Liberty, one and inseparable, and for their God's Bible.

A. C. BOYDEN, of Massachusetts.

Ladies and Gentlemen:—I desire to say but a very few words. I wish in the first place to say that the paper to which we have listened this morning has been the strongest, clearest, ablest paper presented on this subject I have ever listened to in the meetings of this Association. I rejoice, sir, that we have had the subject so clearly defined and well wrought out. It is time for us as educators, that we search for the principle—the foundation of things. Now, in regard to this matter of morality, one speaker says it comes from experience of the man; its applications are in the experience of men. But where, I ask, Mr. President, do men go in their extremity? Every man on this broad earth, where does

he go in his extremity, except to the God that made him? Where shall we go for the elements that come into our deepest nature and are to control our highest destiny? Where shall we go for these principles but to the Word of God, as a standard, as it has been communicated to us, "Love the Lord thy God with all thy heart, mind, soul, and strength, and thy neighbor as thyself." That is the kind of morality we want. Now there is no morality, I undertake to say, that has any vital power to control any man's life and restrain him, keep him in the right course, except Christian morality, and that can only come from this law of God, in every man's soul and everywhere present. What we want to do is to bring out clearly and distinctly before the minds of these children, this consciousness of God within them. "The fear of the Lord is the beginning of all Wisdom."

THE CHAIRMAN: We have remaining but five minutes more for this discussion. I think it is but just that the writer of this paper should have the opportunity of occupying the last five minutes.

E. E. WHITE, LL. D., of Ohio.

The discussion of this paper is an illustration of what I have termed, many times, the difficulty of presenting the truth so as to be understood. If I understood the gentleman that followed next after Dr. Andrews—I think Professor Stern of Wisconsin—he either did not understand my paper or my position, or I did not understand his speech, and the first thing to do is to get an understanding. That whole paper was designed to show that what is needed for effective moral training in the schools is not so much that technical, dogmatic instruction called religion which he spoke against, as the use of religious sanction and influence. It was a good speech but it was not made in answer to my position; that speech did not fit just at this place. Let me say that the position taken in that paper I think will be supported in any community in the United States. I do not believe you can find a community anywhere, as Dr. Peaslee well said, where there is any considerable number of persons who will object to the re-enforcing of moral obligation, by an appeal to God as the source of obligation and duty. You can put into a very small compass, all the men in a state that are in favor of excluding all reference to God and immortality in a public school. Let me say the American people are so vitally interested in the moral training of their children that they are not going to take out of the teacher's hand the liberty or opportunity of making that training the most effective possible. My friends, what this nation most needs is not that the youths shall go out of our schools better mathematicians, better logicians, but that they shall go out loving truth and honor and justice and their neighbors and their God. What this generation is demanding of its educators is to look to the great interests of

this great people and that they shall touch the heart and the life of the young, vitally and effectively ; and if religious sanctions have the power that my friend admitted they have, O, how gladly will they welcome such an appeal as will vitalize the moral precept, and the natural incentives ! That paper did not exclude this incentive at all. It did not even assume that the teaching of religion should have a place in the schools at all. All that is said has been aimed at the teaching of religious doctrines. Nothing of the sort is asked. You might just as well say that we shall not use the sunlight, unless we teach the chemistry of it ; that we shall not breathe air unless we analyze it in the schools, as to say you cannot use religious sanctions unless you teach the dogmatic definitions of religion. We do not want definitions, we do not want dogma stated, but we do want recognition of God and humble obedience to his will. God comes with more power into moral training when we lift up the soul that He may come into their lives. I do not set up any definitions of God. The whole paper is away from it, and the criticism which has been made is based on entire misapprehension of the principal position which I took, and which I carefully endeavored to make clear by simple illustrations. It is an apt illustration of the difficulty of presenting such a subject so that a man shall be rightly understood.

SOME SERIOUS ERRORS IN TEACHING.

BY L. R. KLEMM, PH. D., SUPT. OF SCHOOLS, HAMILTON, OHIO.

I. Introduction.

If I were called upon to compress into a single sentence my criticism of the American school, taking this term in its most comprehensive sense, and remembering that the teacher is the very embodiment of the school — I should say with Hon. Henry Barnard, "Nowhere among civilized nations is the business of education pursued with such utter lack of system, such complete, unsympathizing, independent and self-dependent isolation of effort,— though yet with a fervor, devotion, energy, and natural capacity, almost equally unrivalled." But such a sweeping statement would scarcely suffice for an audience like this. You would wish me to specify my charges. Let me do so.

It is a notable fact, that while the people will not buy an exploded contrivance, nor manufacture goods for the market by means of antiquated machinery, but insist upon the latest improvements, they seem to be satisfied with antiquated methods of teaching in school, such as were applied by the proverbial school-keepers of yore. And while they hire in their workshops and factories nothing but skilled labor, they seem to think it perfectly proper to have persons employed as teachers who have not the remotest idea of what such terms as methods, didactics, etc., imply, so long as these persons represent home-talent. While people would ridicule any one who would travel with rheumatic post-horses, or carry his money in saddle-bags, instead of making use of express trains, and the facilities offered by our unsurpassed American system of banking, these same people would and do permit their children, year after year, to travel by antiquated means, through the curriculum of school. People who advocate good, wholesome food, and who decry adulteration of food, allow their children to be fed with indigestible mental food, in form of grammar rules, which never did, and never will, develop mental faculties or linguistic skill, but which were considered a most necessary part of a scholar's outfit during the "good olden times."

"In the market, it is only the latest improvement which commands a sale, and the steady force of the law of supply and demand, and the

sleepless instinct of gain is a sufficient warrant, that while superfluities are dropped, and improvements are adopted, no invention of an exploded contrivance, no retrogression to an older and less perfect condition will be allowed." Not so in school apparently; here dead conservatism rules supreme. In the erection of schoolhouses, yes, all conceivable improvements and new appliances for physical health and comfort are provided for; such things can be seen by the naked eye, but bad teaching is not easily detected, and often assumes all the airs of good work; and thus the schoolhouse stands in the centre of the town, the most prominent building about, an indestructible monument of dead conservatism.

This conservatism has been exposed to the withering gaze of the public, in the press, from the pulpit, from the lecture rostrum, in season, and out of season, but it is a plant of hardy growth; it feeds upon the heart's blood of the younger generation. It was again exposed in the most glaring manner in the educational exhibit in New Orleans, where an opportunity was given to compare our results with those of the schools of foreign countries, such as France and Japan. To search for the causes of this conservatism is unnecessary; they are so apparent to every thinking person, that I may leave them undiscussed. Only this fact may be mentioned. The majority of teachers are merely keeping school, and the average time they devote to this occupation is between three and four years. That is the argument in a nut-shell. All the noble work of Normal Schools, Training Schools, and Teachers' Institutes, is but the dropping on a hot stone. Let us hope, that since the dropping is constant, it will in time cool the stone and saturate it.

Among the most serious errors of teaching in this country are: (1) the *Per cent. System of Marking and Grading*; (2) *Competitive and too Frequent Examinations*; (3) *Role Learning, or Unproductive Memorizing of Textbooks*.

II. *Per cent. System of Marking and Grading.*

This system of grading the pupils, that is, to determine their relative standing in the class on a scale of one hundred, has greatly undermined the teacher's value. It has brought it about, that pupils think that their close attention to every day duties is not needed, that a little "studying up" at the close of the term will secure them the necessary "per cents." And this, to speak candidly, is arguing correctly. Since according to the per cent. system, all examination questions must be

matter-of-fact questions, so that they may be marked on a scale of one hundred, it will easily be seen, that facts temporarily stored up in the memory will serve the purpose of passing the examination. This is contrary to the principles of sound and rational education, which condemn such a method of acquiring knowledge as false and pernicious. Let us look the question squarely in the face. What is to be done to effect a reform? The surest way of finding the right way again, after we have lost it, is to go back whence we started. How did we get into the mire of the per cent. system? (1) The evident desire to grade the pupils' work accurately led us to adopt the scale, that is, the customary per cent. scale. (2) The scale has its influence upon the mode of questioning, that is to say, little matter-of-fact questions came to be asked, five, ten, or twenty in number, each worth 20, 10, or 5 per cent., because this afforded an easy marking of the manuscripts. (3) This mode of questioning in examination had its inevitable and pernicious effect upon the teaching, which was degraded to mere memory work. Teachers knowing that skill of expression, the ability of grasping the farther bearings of a fact upon others, and such proofs of good scholarship are not inquired into during examination, teachers knowing this fashioned their instruction after the requirements of examination, and thus we have an unbroken chain of cause and effect. In order to improve the teaching, and bring it back to sound and rational principles, we must take away the high pressure of the per cent. system; first, by doing away with the scale which suggests the mode of questioning; second, change the mode of dry, matter-of-fact questioning, which conditions the mode of teaching; third, change our mode of teaching, by heeding the laws of growth, in order to comply with the requirements of nature and actual life.

The per cent. system subjects all the pupils of a class to the treatment of Strassburg geese, which are fed in close confinement, that is, noodled, as the technical term has it, till their livers are unnaturally large, only that it is the memory of the children which is thus noodled.

There is also an unpardonable injustice in saying, "This child has reached 90 per cent., the other only 60 per cent." Who knows but that the 60 per cent. is the result of hard and earnest toil of a boy who may have labored under disadvantages which the other boy who reached 90 per cent. never knew? Who knows but that the 60-per cent. boy, if measured by a hitherto unknown scale, would far outrank the other in character, in steadfastness of purpose, in virtue, in tenacity, in moral strength, and in other regards? While the 90-

per cent. boy was perhaps surrounded by all the advantages which a home of culture and refinement offers, the 60-per cent. boy, it may be, could attend school but half the time, and had to help support the family—and yet, he reached 60 per cent. ! The injustice is so glaring, that it cries for *redress*.

Here is a set of questions of the old customary type :

What isthmus joins North and South America ?

What cape projects into the Arctic Ocean ?

What island east of Greenland ?

What great river empties into the Gulf of Mexico ?

What river empties into the Arctic Ocean ?

What country southeast of Mexico ?

What country north of New England ?

What is the largest river in New England ?

Which is the smallest of the Middle States ?

What seaport in South Carolina ?

These are patent questions suggested, nay required, by the abominable system of grading by per cents. If we do away with this mode of grading papers and pupils, we can ask questions of wider bearing, questions, the answering of which will permit the pupil to show his skill in applying language, to give a full account of certain branches of knowledge as far as he has mastered them, and show better, not only what he knows, but how he knows it. In the high school it should be the custom to give out, at the end of each term, a limited number of themes from each study (except mathematics), and each pupil be permitted to choose one of them, and to write as complete a dissertation as possible upon that subject. These essays are either satisfactory or they are not. In the latter case a second examination may be required. This procedure will make the gauging of children's intellectual depth by per cents. impossible. It will make the teacher's instruction more rational and thorough. It will teach the pupils to learn well. But above all, it will cause their power of application to grow. It will make a language lesson of every lesson, even in arithmetic, since it obliges them to express well what they have learned. Granted, that this is not making the work of the teacher easier ; it need scarcely be asserted that the schools are not maintained for the better accommodation of teachers.

There is this also to be argued against the per cent. system, at least so far as it is found in the primary grades : It is the using of terms which are absolutely incomprehensible to the small child. It under-

stands, if we say an exercise is done well or not well. It appreciates these terms, and if given in the proper spirit of approbation or reproof, they may exercise a beneficial influence upon the child's will power. But to mark the child's work, eighty-five per cent., sixty per cent., etc., is about as nonsensical, as marking it Popocatepetl or Parallelopipedon. In other words, it is using a symbol where no symbol as yet is desirable; moreover, it is a symbol which only the maturer mind of the intermediate pupil will understand, when he begins to study the subject of percentage.

III. Competition in School.

The high pressure of the per cent. system on the one hand, competition caused by too many examinations on the other, crush out all individuality and make of our boys and girls men and women of whom thirteen even do not make a dozen. "Competition is a curse, because it treats children as if they were all endowed with the same aptitude," says a writer in a recent number of an educational journal. "Overwork on the one side," he says, "coupled with self-conceit; despair on the other, coupled with the entire loss of energy, are the results of competition in our schools." He also remarks that "competition is immoral, because it is based upon the law of the survival of the fittest, which, however natural it may be, is not a moral law."

Now as to the number of examinations and as to their mode, the superintendent, by virtue of his position, has the decision in his hand. But that does not, and can not, remove competition from our schools entirely, since in some classes the teacher does nothing but examine all day. The following sarcastic statement is the gist of an article upon this subject from the pen of Superintendent Aaron Gove, of Denver, a most accomplished leader of educational affairs in the West: "Teachers are not teaching, they are drifting. A pupil is assigned a task. Soon he is examined. When he has demonstrated the accomplishment of his task he is excused. The recitation is concluded. He is assigned another task. An examination determines its performance. So is composed the daily routine. He is tested, tried constantly, not taught. If he does not know a certain thing, he is asked to look it up in his textbook. The pupil learns that recitation is examination. He must present results, no matter how he obtained them. The chief duties of the adult person in the schoolroom are to prevent riot and to examine pupils!"

Is this an exaggeration? May God grant it! These daily examina-

tions rob the pupil of that tranquility without which no healthy mental growth is possible; they defraud the teacher of the opportunity of applying herself to the weaker pupils, and lending them a helping hand, because she spends her time in marking her pupils' work on a scale of one hundred, and in writing examination questions on the board.

The following paragraph has recently been going the rounds of the educational press :—

“Many educators appear to have a craze, just now, against the marking system. To such, we venture to commend a careful study of an ‘evasive answer’ which a certain high-school principal gave to his boys who had just maintained a heated debate upon the expediency of this system. The boys were enthusiastic base-ball players, and had a match game pending. The principal proposed to them to have the coming match played without keeping any score. He urged that they could play better without the fear of the scorer’s pencil. They would *know* whether they played well or not, and the record might only show lucky or unlucky accidents. The marking system had the best of the argument, and it was not abolished in that school.”

How low an estimate the editor must have of the penetration of his readers. Don’t you see that he disregards the essential objection to the marking, to wit :—the curse of competition ?

This mode of daily competitive examinations is like mildew upon the work of pupils, and should speedily give way to teaching. It is but just to say, that many teachers have recognized the evil influence of the per cent. system and competitive examinations, and spend their time *in occupation for which they were engaged* by the authorities. Entering a schoolroom, it can at once be seen whether such a teacher or a mere school-keeper holds sway. In the schoolroom of the teacher the pupils are as a rule more eager to learn, than in the one where daily examinations are held, and that painful anxiety so often visible upon the pupils’ faces, which blights all joys and pleasures of life, will not be found. The teacher bears in mind, that not two pupils are gifted alike by Mother Nature, just as little as she produces two leaves exactly alike. The inevitable difference in aptitude, in power of comprehension and application found among children is taken into consideration, and each pupil is permitted and led to go to the limits of his capabilities. The school-keeper on the other hand, who believes in grading on the scale of one hundred, spurs his pupils, drives and pushes them by means of competitive examinations, considering them all alike in natural endowments and capabilities, and the short but im-

portant educational law "Individualize!" is unknown to him. Let me add here, though without much stress, for the matter is too self-evident, competitive examinations are one of the causes of the fact that the higher grades of our common schools have the consumption, while the lower grades suffer from dropsy.

IV. Memorizing the Textbook.

The third, though not the last, and by no means the least, of the antediluvian fossils, is the reliance of teachers and pupils on books; rote-learning, or unproductive memorizing of the textbooks. When we see children learn by heart from the printed page such disconnected, though highly flavored, tid-bits of information as are found almost on every page of the textbooks of geography, as for instance: Extensive forests of deciduous trees cover the greater part of this section; —The Stone mountain in De Kalb County is a great curiosity; —Indian mounds of an unknown antiquity are found in Georgia; —Zenith and Nadir are two Arabic terms imparting their own signification; —we cannot but thank kind Providence for having gifted the human memory with the happy faculty of throwing off what has not gone through the mill of reason and understanding. What a frightful waste of energy is there in schools where such unpalatable and indigestible matter is set before the pupils who are told to "study" their geography lesson!

Or when we see children try to "figure out," or mechanically solve problems in arithmetic, by applying rules committed to memory from the textbook, instead of rules which are the direct result of practice and reasoning — we cannot but admit, that there is more than one grain of truth in the indignant remark of a great lecturer, "Our country has become great, not because of its public school system, but despite of it."

Or when we hear children recite grammar rules, and prattle about numeral adjectives, correlative conjunctions, or causal adverbial clauses, or inseparable phrases, or subordinate propositions, or coordinate forms of conjugation, and the like, before they can give an intelligent account of an event, or even give utterance to a simple thought without doing violence to their mother-tongue — we cannot but stand in mute astonishment, and wonder at the incongruities which exist between the requirements of life and those of the schoolmaster.

Memorizing the textbook is but a poor substitute for true knowledge. It is a sad mistake to think that children of our primary and intermediate

grades gain much valuable knowledge from textbooks. Pupils of riper age and adults may, and unquestionably do, gain knowledge from the printed pages,—young children do not. There are two kinds of knowledge: (1), that which has become part of our being, having been mentally assimilated, as it were; and (2), that with which we stuff our pockets (our memory). Those who learn for the sake of passing an examination merely stuff their pockets. This is done much faster than in the other way. Those who chew their mental food, digest and assimilate it, may at times get discouraged at the seemingly small amount they gain; but since they learn thoroughly, they can never lose it and in the end are the gainers. True knowledge is logically and naturally linked with previous cognitions. *Such knowledge is experience*, while the pupil who stuffs his memory is ever obliged to fill it anew; his knowledge is of a fleeting nature. Besides, he weakens his memory by mentally swallowing and not digesting. If we look at our psychological organs, as we do at our physiological organs, we cannot fail to notice the striking resemblance. A person who learns by using his five senses, and is made to clearly understand the logical connection between new knowledge and previous cognitions, will find himself gaining in intellectual strength. History and our own every-day experience tell us that it is these very persons who make their mark in the world, who prove to be the strongest and the bravest in the battle of life.

Says a gifted writer: "The protest against mechanical education, against cramming, and working for per cents., is timely, and cannot be too strongly put. This protest, however, is hurled properly against a false method of imparting knowledge. If the mechanical methods were successful in conveying knowledge, the fact that they are mechanical would not stand against them. If you can cram knowledge into children, in God's name do it; but *you cannot*. The student who is crammed is not intelligent; he gains neither information nor discipline. There is no mechanical way of providing intellectual results."

V. Reflections.

Having thus frankly stated the most obvious defects in teaching, as found nearly everywhere in this country, let me search for the redeeming features if there be any. Spinoza once said, "Comprehending much means pardoning much." I believe that if we know the causes of the defects which I have touched upon, they will lose much of their bad odor.

I may state with due candor that the per cent. system of grading, daily competition, and dry, humdrum textbook cramming are typical American institutions. Nowhere among civilized nations can they be found in such an excellent state of perfection as in America. "And thereby hangs a tale."

There is in every nation, as in the life of every individual, a time of plasticity. Whatever is learned and acquired by experience during this time becomes the inalienable property of the learner. During this time of plasticity the human being develops his individuality. Certain qualities in him become fixed and capable of being transmitted to his children. What is individuality in the person is type in the race or nation. The Anglo-Saxons, though of German origin, developed a type, different from the German, soon after they took possession of the British Isle. And again, the English settlers in America, cut loose, as they were, from the mother country and its culture, and dependent upon their own strength, ingenuity, and resources, soon drifted away from old established customs, thoughts, modes of life and action, adapted themselves to the surrounding circumstances, and developed a type peculiarly American. This type became so pronounced during the 18th century, that it asserted itself in violent opposition to England. The habits, thoughts, social relations, mode of life, and manner of action, were not colonial any longer, —they had become national.

In the same way the mode of teaching and learning had developed certain peculiar traits, had become typical. We all know what caused the great abundance of *self-made men*; they were, and still are, typically American. Now the typical American *boy* gained his knowledge as the man gained his fortune — namely, without assistance. What he is and has, he is and has by his own exertion, attended by much waste of time and energy. The self-made *student* acquires his knowledge from books, not through instruction. He does not learn a thing for the sake of knowing it, or for the sake of the discipline it affords, but merely as a means toward securing other ends.

"The acquisition and retention of exact, systematic, true, good, and beautiful knowledge, as gained through thorough instruction and systematic training, creates a clear mind, a pure heart, and a noble character." It is one of the most powerful means toward that ideal of all educational efforts: the harmonious, well-balanced being. Now the self-made student, like the self-made man, is invariably one-sided in his growth; his knowledge is seldom exact, never systematic, scarcely

ever logically connected, full of inaccuracies, and it is good and beautiful only in so far as it is of use in assisting the growth and comfort of the learner.

Do not misunderstand me: I do not mean to say that the pupil's own exertion is superfluous. By no means. I cannot spare him the action of chewing, swallowing, digesting, and assimilating his mental food, but what should be done on the part of the teacher is the cooking and the serving. The books offer raw material. If every person had to be his own cook, what a frightful mortality in consequence of disorder of the digestive organs would ensue! Now I maintain, that the self-made student is his own cook, and a most ignorant Bridget at that in most cases. It is said: To learn to make intelligent use of books is one of the main objects of school education. Granted; but a more important object is to develop the child's inherent faculties, its organs of observation, etc.

I have no fault to find with the modes of teaching of the typical American school of the last and the earlier part of this century. They were legitimate facts. They were the exponents of *life* in America. That the typical American teacher of yore kept school, heard recitations, assigned lessons, examined and tested daily and hourly,—we can comprehend that—and pardon it. But life and the American people have changed. The old American type is fast receding, since untold millions of immigrants have arrived. "The American composite character now betrays its mixed origin; everything American is a fusion of distant and antagonistic elements. The currents of thought are both cosmo-politic and particularistic; active intellect, practical skill, world-wide enterprise meet dead conservatism in church, on the bench, and in school; the most liberal and revolutionary ideas meet and clash with devoted habits and meek creeds in home and family; aggressive freedom with conceited narrowness. Nothing can be praised in our wide realm without an abundance of damning exceptions, and nothing denounced without a liberal share of cordial praise." The Union is a gigantic crucible within which representatives of the different nations are fused to a homogeneous whole. This cannot be done in a hurry and not without violent contention, but the ultimate result is only a question of time. Each nation adds some of its virtues, and, alas! some of its vices to the fusion.

That we are at present in a second era of plasticity is seen from the changes going on within reach of our own experience. Thirty years ago this country was songless, having then but one singing bird, and

that was only a mocking bird. Gen. Grant said he had known in his youth but two tunes ; one was Yankee Doodle, and the other — wasn't. Look upon the varieties in dress we enjoy, and then think of the typical get-up of Brother Jonathan, two generations ago. Look at the wonderful start we have made in art-designs and decorations, and then view with wonder and reverence the clumsy furniture and machinery of the good olden times. Look at the absolute styleless architecture of former years, and the infinite variety now displayed everywhere — even in Philadelphia.

And thus we are changing our mode of teaching and studying. When the great influx of foreign elements ceases, the mixture in the crucible becomes clear, and the future type of the American school will have been developed. It will not be European, rest assured, neither will it be American, as that term is understood now.

The American type, as most distinctly represented by the New Englander, is very strong, and has remarkable powers of assimilation ; it has the proverbial ostrich's stomach, but it is nevertheless subject to the laws of evolution. The changes it undergoes are not noticed in the East and South so much as in the great West. As the general habitus of the people here in the West is already different from that of New England, so the practices of the common school of the West are different from those of the East, and their results are incomparably better, as was shown in the New Orleans' Exposition to every unprejudiced observer.

It is devoutly to be hoped, that the pernicious per cent. system of grading pupils, immoral competition, constant testing, and soulless memorizing of the printed page, will give way to rational methods based upon the well-defined laws of growth, methods that will lead us up to an intellectual culture such as the world has never witnessed before !

OTHER ERRORS IN TEACHING.

BY J. M. GREENWOOD, SUPT. SCHOOLS, KANSAS CITY, MO.

Introduction.

The brain is the organ of the mind, else the teaching of physiology is erroneous.

If the doctrine be accepted that the shape of the brain and the development of its convolutions indicate intelligence, then it follows that the child of seven or eight years of age, possessing a good bodily organism, is not a "little fool," and for the following reasons:—

1. Dutch anatomists ascertained that the weight of the cerebrum in the new-born infant was to its weight in the adult as 96 to 157, while the weight of the cerebellum in the new-born infant was to its weight in the adult as 22 to 50; also the weight of the cerebellum to the cerebrum in the new-born infant was found to vary from one thirtieth to one twenty-sixth part, while in male adults the ratio is 1 to $8\frac{1}{3}$ and in females 1 to $8\frac{1}{4}$.

2. Drs. Boyd and Thurman ascertained from an examination of many cases that at the seventh year the brain in the male has reached $\frac{5}{8}$ of its ultimate weight, and that in the female for the same age is $\frac{4}{5}$ of its ultimate weight.

From the rapid growth of the cerebrum to the seventh year, which is far more rapid than the growth of the body for the same period, we may infer that the brain, as well as the body, is capable of performing considerable amount of work. We know from observation what weights little children will tug about and lift when left to themselves. Frequently, a babe twelve or fifteen months old will hang on to a limb with both hands, sustaining its own weight, from thirty to sixty seconds. As the infant grows older its strength increases rapidly.

3. However, it is not contended that children are more than children in this discussion; but I will endeavor to show that, physically and mentally, healthy children are able to do much more work than educators generally give them credit for, and that in consequence of this erroneous conception, the child at school, in very many instances, is kept doing nothing laboriously, and that doing nothing laboriously is

the "dry-rot" that hangs like a blight over our schools, darkens our instruction, and benumbs the mental faculties of many children. Neither is it safe to conclude that the child's brain at the age of seven, having nearly reached its growth so far as size and shape are involved, that it is capable of performing any very great or prolonged mental effort requiring considerable expenditure of nervous energy. In fact, as an organ capable of doing work, its co-efficient must be represented by a small fraction if in normal conditions at maturity, the co-efficient be unity. At this early age those internal changes in structural development and the formation of active nerve centres with the corresponding increase in the deposition of gray matter, have not occurred, and the brain is soft and watery.

But the error, as I conceive it, is that the present educational treatment of children is weak and puerile, and that not even half credit is accorded them on their actual working power. If their brains were "wet dough," the most of the present educational diet would be too thin for them.

To maintain the proposition, I will refer to a few feasts that educational doctors have prepared for small school children, and ask you to inspect carefully the bills of fare, and then decide at your leisure.

Foolishness of Teaching.

"One thumb and one thumb are how many thumbs?" This is a weighty problem in primary arithmetic. The mental effort required by the abstract nature of the proposition for the six year old to grasp the relationship existing between one thumb and another one thumb involves at the outset otherness, plurality, and thumbship totality. This is more than a common question; it is decidedly uncommon, as a little reflection must convince any one. First, there is the idea of a thumb. A thumb may be of any conceivable kind. Thumb is the genus: some species are comical and chubby in shape; others, blunt, winding, and hypothetical; not a few slender, snaky, and sinister; while many are good, solid, honest thumbs. From one thumb first comes the percept, and from an extended tour in the thumb region the general concept is obtained. But this is somewhat in advance of the real issue, which involves two thumbs only. Suppose the child knows an ordinary thumb, or even a common scrub thumb, when he sees it. This acquisition is so much positive knowledge,—a working capital, so to speak, in thumb stock. It is the initial point in thumb problems.

The mind must invariably revert to this centre and then strike out, as the spokes from a hub, in search of new percepts. But we must trace the process more minutely. One thumb! What a word—"one thumb!" The pupil looks at one of his thumbs. He beholds it as a thumb, simple, naked, and perhaps—clean. Yet it is a thumb, flesh and blood. He puts it into his mouth and is not mistaken. Next he glances around. Another thumb is not hard to find. It is seized upon and, mentally speaking, it is placed in juxtaposition with thumb number one. Reduction is the third step in this tremendous process. A slight displacement of nerve-cells, a tremulous vibratory motion, a recognition of the aforesaid motion and the combustion of a very small quantity of brain fuel, and the reduction and transformation are complete, the two thumbs become double and single, the abstract form of which is one thumb + one thumb = two thumbs, whence, *quod erat demonstrandum*; or the proposition is completely established that somebody is otherwise. This is a great forward movement in incipient thought. It is a grand discovery in the direction of helping the child to find himself even from the ends of his thumbs to the tips of his toes.

So far the work has been synthetic; now it is analytic. The two thumbs must be torn asunder, and each examined separately and all likenesses and differences carefully observed. This, technically, is called "clinching the nail."

Sometimes this problem assumes a more logical interpretation. Not long since, I heard a square-bodied, square-headed, red-haired youngster deliver himself of the following bit of eloquence upon the "thumbs," which was proposed to him in this form:—If you have one thumb on your right hand and one thumb on your left hand, how many thumbs have you on both hands?

SPEECH:—Since I have *one* thumb on my *right* hand and *one* thumb on my *left* hand, I have as many thumbs on my *right* hand and on my *left* hand as the sum of the thumbs on both hands, which is two thumbs. Therefore, I have as many thumbs on my *right* hand and on my *left* hand as the sum of the thumbs on both hands, or two thumbs. The argument was conclusive, and the orator stuck up his thumbs as evidence of his real knowledge of the subject "on hands."

Of late years more rapid nonsense has found its way into primary arithmetical teaching than in any other branch of our common school course. Thumbs, holes, shoe-pegs, bunches of sticks, beans, grains of corn, and numerous other devices, pictures, and silly exercises, have

been resorted to as aids in this elementary work, and to cap the climax, a gang of erratic comets have darkened instruction and hobbled the children by hedging them in with over weights.

In olden times mailed knights when clad in armor were so weighted down that when thrown to the ground they were as helpless as turtles turned on their backs on a level floor. This "turtle work" is what is the matter with much of the arithmetical teaching in the schools of the present time.

The little child of six or seven summers can stand flat-footed and jump three or four feet, yet he must walk as it were with his feet tied together and wear a narrow sack-slip lest he break away from thumbs, pegs, pictures, and learn how to handle numbers. Instead of thinking and telling numbers, he must do numbers. *Bosh!*

Did you ever teach a little three or four year old to count? Did you ever teach arithmetic to little children? Did you ever teach them how to translate their word language into arithmetical characters, and note the length of time it required for them to make the transition? Did you then put them to their best working licks and observe how much they could do without injury to themselves? Have you looked closely into the number work so sharply outlined in school reports and little arithmetics for the sole use and benefit of little children during their first, second, and third years in school? Have you? How did it impress you? *Honest Indian*,—and no dodging? Have you meandered over the arithmetical charts as a second course in this mental bill of fare? How did you relish the aroma thereof? Were you a youngster again, would you like to be stall-fed on it as a regular figured diet daily for half your schoolboy life? Does not the very thought suggest woods, butterflies, fishing, swimming, and fighting "bumble-bees" in the clover fields? Is it not bitterer than "Rue-tea"?

Again, have you examined a score or more of primary arithmetics recently issued, and then wondered if it would require thirty months of childhood to absorb the contents of any one? Did the result of the examination leave an impression upon your mind that it was a very little work long drawn out? I know that nearly all these books are real pretty books, elegantly illustrated, beautifully printed, large type, but a delusion and a snare inside. The authors are not to blame. They made the books under a misapprehension of the child's ability,—a misapprehension of educational teaching which assumes a thorough acquaintance of the child on paper instead of the real child himself.

Let us press this question still nearer home. Teacher, listener, how

long did it take you to count from one to ten? From ten to a hundred? From a hundred to a thousand? Speak out in meeting! You will not be hurt! How many months and years did it take for you to learn the figures from 0 to 9? Tell me truly, did these stupendous efforts knock all your brains into a lump from which recovery now is doubtful? Do you remember the minute, yea even the very instant, when it flashed across your mind, the difference between the *spoken* word "ten," the *written* word "ten," and the "10"? Didn't you know this long before it was told to you?

Philosophers have sopped with Socrates, ripped with Euripides, cantered with Themistocles, but when it comes to a little child's dying with Arabides, slow, tortuous poisoning, it is really too much for humanity to endure! Are our little children little fools? Is there not a presumption on the other side? Have we not about reached the extreme limit of all this hampering, and doing, and coddling business?

Is it not foolishness in teaching when children are set to doing over and over again what they already know, and have known ere they darkened a schoolhouse door?

To give a pointed illustration I will copy a few exercises from a new book:—

$1 + 4 = ?$	$19 + 1 = ?$
$4 + 5 = ?$	$13 + 7 = ?$
$3 + 3 = ?$	$17 + 2 = ?$
$11 + 1 = ?$	

Suppose the pupil learns that $1 + 4 = 5$, or $4 + 1 = 5$, what more can he get out of it by following that line of thought? But if we vary the question and then put it in this form, namely, find all the numbers, taking two at a time, that will make five, and the question develops thought. The child mind sees five as an aggregate of several numbers, and breaks it to pieces. From finding two numbers it may be broken into three or more numbers, not limiting the separation always to integers.

Lest any one should infer that I am opposed to illustrations and various devices needful to give pupils a clear understanding of a subject, I always employ them as aids, but will not make or use them as the chief end of teaching. I oppose that practice which would require a lecturer on homicide, before a class of legal students, to kill a person in order to show what murder is, and this school-fetich has been carried so far and illustrated so much and so poorly—that intellectual murder follows as a corollary.

Teachers of young children, especially, must be explorers. They should find out what the little children know as well as what they don't know. Take an inventory of each child's capital stock. It may be a confused mass, yet not altogether useless, and much of it available for working purposes. Scattered among this rubbish is considerable positive information. Pick it out and utilize it. While exploring in this lumber room, use your eyes and your common sense, and do not forget that you were once a child and had childish thoughts. Live over again your childhood. It differs but little from that of the children of the present.

It was broadly intimated that the current method in vogue in most graded schools pursued in teaching primary arithmetic, is a stupefying and deadening process. Unless the truthfulness of this statement can be verified, I am guilty of wilful misrepresentation and should be denounced as a teacher of false and mischievous doctrines.

For years there has been a very general complaint that the pupils of most schools were making very slow progress in arithmetic. The allegation is not contradicted by the facts. Is there, then, an explanation of this phenomenon? I believe there is, and that it is not a very difficult matter to trace the cause to its origin. Some dozen or more years ago, a hue and cry was raised throughout the country against the pernicious practice of teaching mental arithmetic, and as an offset, books were made, and mental arithmetic as a separate, independent, essential course of study, was eliminated, and with its ejection came troops of primary books for the little folks, and combination books for the larger ones. Teachers and school authorities went wild over the grand discovery, and a great deal of substantial arithmetical teaching vanished in smoke, and to-day we are reaping the result of that educational error.

No combination book can take the place of the mental arithmetic, I care not how well the book may be peppered and salted with "selected and original problems." The two will not work well together. A critical examination of how pupils solve the two classes of problems is a sufficient reason why the methods are not the same and can not be reduced to the same process. In short, mental arithmetic is the logic of the common branches. There is no other substitute.

To tear a system to pieces is an easy matter, but to rear another and a better one in its place is what is expected from one who has demolished the former. So far my work has been destructive; now it must be constructive.

If the child does not know how to count, he must be taught. Let him count objects, the pupils in the schoolroom, etc. A few days will suffice to teach those who do not know, to count to 100. With counting, carry forward writing and reading numbers. There are only 10 forms to learn, and they are more easily learned than any six letters of the alphabet.

Let this work be followed by oral and written drills, sharply and rapidly given in the fundamental processes of arithmetic each day. Two points must be secured,—accuracy and rapidity. The down-sitting and up-rising slate work must be largely avoided. It is copying, mostly, without ideas. However, all work put on slate, paper, or blackboard should be neatly done. Concrete the exercises as much as possible. In teaching the pupils to add, subtract, multiply and divide, using small numbers at first, do not be afraid to introduce fractions, both common and decimal; common during the first year and decimals enough to use them, the second year. Two or three recent primary arithmetics have incorporated fractions from the beginning. The authors did wisely. To them I take off my hat and bow.

Dull, mechanical work in numbers is of no educational value, and yet two-thirds of all arithmetical work in graded, ungraded, private schools, seminaries, and colleges, fall under this criticism. Children are kept hammering year in and year out, on topics that long since lost all their freshness. Eating “Limberger cheese and rusty mackerel” for three years at a stretch, is the greatest variety compared to the barren fields of numbers in which our little fellows are fed on spoon-victuals dished up under the grandiloquent title of “solving problems.” Angels in heaven hang their heads at sight of such desecration of sacred interests!

After such a course, a real teacher, with “long, sharp-pointed pegging awls,” is frequently kept busy for three months trying to locate a single definite idea in a youngster’s mind. Paul was floored on account of having done certain matters of a trivial nature in “all good conscience.” Would that a brilliant light might give the “do-lights” a small foretaste of electric power before it is too late!

It grieves me to use such mild language, but experience teaches vigorously and effectively at times.

When a pupil handles fractions in written and oral problems quickly and accurately, he is prepared to begin mental arithmetic as a separate and independent course of study. Prior to this time, his mental work

has been carried on without the use of the book. There are usually forty or fifty pages in the back of the mental arithmetics that have an educational value. Mr. George Seymour "struck the nail on the head" when he classified the problems in his mental arithmetic. Prof. Brooks made a move in that direction ; but halted too soon.

It may be accepted as generally true that the pupil, good in mental arithmetic, never has much trouble with the written arithmetic in any phase of the work. The converse is not true.

Direction—for Mental Arithmetic Teaching :—

The teacher will read or state the problem once, slowly and distinctly: the pupil gives the answer. The pupil or pupils reproduce the problem, next the analysis, and, lastly, the conclusion. Long, tedious analyses are to be avoided.

Pupils must not use pen or pencil in the preparation of a lesson: they must not use the book when they recite.

A tremendous drill in mental arithmetic fits the pupil well for the more advanced work and for beginning algebra.

The only test of first-class teaching is—that the entire class is good—not a few favored ones.

PRESIDENT CALKINS :—I have no doubt that the audience regrets as I do that, owing to the lateness of the hour, this subject cannot now be further discussed. We have one other very brief matter that demands attention before adjournment—the report of the nominating committee, which will be presented by Joseph L. Pickard, of Iowa, Chairman of the Committee on Nominations.

Mr. President :—Your Committee on Nomination have completed their work and have to present to you their unanimous conclusion. [See page 13.]

THE PRESIDENT :—You have heard the report of the nominating committee, what is your pleasure ?

MR. HINSDALE, of Ohio :—I move that it be accepted.

Motion seconded.

The motion was put, and the President announced that the report on nominations had been unanimously accepted.

On motion it was voted that Mr. E. E. White, of Ohio, be directed to deposit the ballot for the election of these officers, in view of the Constitution which declares they shall be elected by ballot.

Mr. White, acting under this instruction of the Association, stated, "That the duties have been performed and the persons named in the

report of the nominating committee are respectively elected to their positions, unanimously. [See list, page 13.]

THE PRESIDENT:—The teller reports the unanimous election of the respective officers nominated. I therefore declare that they have been duly elected as officers of this Association for the ensuing year.

Adjourned until 8 P. M.

FIFTH SESSION.

Thursday, July 15, 1886, 8 P. M.

Met pursuant to adjournment. President Calkins in the chair. Reading of minutes, reports, etc.

THE PRESIDENT: I have now the honor of introducing to the audience, Col. William Preston Johnston, President of the Tulane University, New Orleans, Louisiana, who will deliver an address on Education in Louisiana.

EDUCATION IN LOUISIANA.

BY WM. PRESTON JOHNSTON, PRESIDENT TULANE UNIVERSITY,
NEW ORLEANS, LA.

Teachers of the United States :

I pause, when I salute you by such a title, to do homage to the tremendous idea embodied in it.

Teachers of the United States : I am here in obedience to your behest, to contribute my grain of sand to the ant hill which we mortals laboriously heap up—grain by grain—and call knowledge, or by some name equally grand and equally vain.

I have labelled my grain of sand "Education in Louisiana," lest some among you may mistake me for a Pangnestic, come to teach you some new truth, or the All-Truth which suffices. Yet my talk aims to be but a bit of information, which the philosophers may, if they please, take into account with their other data, and generalize upon.

I have a belief that one of the best ways to master a vast subject is to take one part of it and learn to understand it intelligently in its obvious bearings, and then another part, and then still another ; and if we shall then put these known parts side by side in our minds and compare them together, their resemblances and their differences, their accidents and their essentials, we may come to discover the underlying principle which gives unity to the whole subject.

In my own teaching I have found that the History of Greece, and Plutarch's Lives made an admirable segment of historical study to inflame the mind of youth. Then, if the student, passing along the noble Appian Way of Roman Legend and Institutions, would, by a new road and a new gate, come to that life of feudal times, which is so different in all its formal and spiritual aspects, he would find himself better prepared to understand Modern History than if he had attempted to memorize all the catalogues of Chinese and Egyptian dynasties, and to decipher the inscriptions of Assyrian and Babylonian bricks, and to know the ceremonial institutions of all savage tribes, and much more to boot. For in seeking the many, there is danger of missing the much.

May we not then, in this great subject of education, safely follow so good a method? If so, I shall be forgiven, if I take a question, relatively not large in the broad field of thought, and bring to your attention some facts, new to you, regarding it, to be compared and coordinated with other larger data pertinent to education. A dragon-fly will reveal wonders under the microscope—so it be a real insect, and not a humbug. I bring you to-day a small matter for your microscopes—Education in one of the United States. There are states to be cited and quoted and boasted of as models, and their representatives are not slow to avail themselves of the prerogative. But Louisiana is not one of these. Her position is exceptional. When I was at Yale College, that student who distinguished himself by taking the *lowest* honor at the Junior Exhibition, received from his grateful classmates, “A Wooden Spoon,”—with appropriate remarks. Strange to say, he was generally quite popular. Nobody was jealous of him. He was always “a good fellow,” even if a trifle shiftless and idle. And he bore his honors meekly. Now Louisiana is the most illiterate state in the Union; and I therefore claim for her “*the Wooden Spoon*” in the great Interstate Educational Exhibition.

But, pardon me yet another word about this college parable. Remember the race is not to the swift, nor the battle to the strong. The Wooden Spoon man, who was the last at the distribution of honors in college, was not always, nor often, last in the race and the battle of life. If there was in him stuff for the making of a man, he not unfrequently evinced the irony of fate, by proving that the last shall be first. Jena was the forerunner of Sedan. Where strength abides, overthrow is the spur to aspiration and the augury of success. Permit me, therefore, to remind you, fortunate sister commonwealths, that this country is but a young nation. We are as yet awarding mere *collegiate* honors. The future is a long time. In its decades and centuries and cycles, strange changes will occur. There are some among us who believe that spiritual forces are stronger than matter; that “the heaviest battalion” theory, while true enough in its way, is but the partial statement of a truth; and that will-power and intelligence and spiritual righteousness—the divine and eternal forces—do evolve heavier battalions still against the so-called heaviest. There is no last word here in this world.

Do not be astonished, then, if I tell you that there are men resolved and banded together, and animated by a heroic enthusiasm, who are determined that the last *shall be* first. There are men in Louisiana

whom no prospect of worldly advantage, no fear of toil or unpopularity, and no dearth of immediate results, can restrain or tire in a noble ardor to lift that State from the Slough of Despond. The fiat has gone forth. The awakening has begun. Already we see the evidences in city and town and hamlet and remote country side. But the giant has not yet put on his strength, and the labors of the future are, in proportion to those of the past, as a mountain to a molehill. There is a faith that shall remove mountains, and verily this mountain of ignorance shall be removed and thrown down and cast into the sea.

My topic is Education in Louisiana. But what is Louisiana? Everybody knows what New England is, with its granite hills, and tidy villages, and teeming and intelligent skilled labor, and seething philanthropy, and active wealth, and everything else which constitutes settled, well-ordered commonwealths and communities, with nothing to do but take the stitch in time that saves nine. And everybody knows what Chicago is—and St. Louis too; you see I have prudence enough left in me not to name one without the other. Everybody knows what a cyclone-pivot of human energy a big western city like this is. And everybody knows what life on these great plains means, where the Time-Spirit, the *Zeit-Geist*, sweeps around the horizon, and lays here a finger to mark the site of a city, and touches there a point for an academy, or college, or university, and says, "Let there be light," and lo! the beauties of the earth and the splendors of the heavens are revealed. But who knows Louisiana? Do you, teachers assembled here to-day? Do you, Mr. President? Does the speaker who comes with its message—its pitiful cry—to the learned and wise gathered here? Not I, by my faith! There are secrets in its psychology I have not got at.

It is easy enough to say that at the mouth of the great, rolling Mississippi lies a wonderful Delta, fat with a fertility which would shame the Nile and the Ganges. Through its vast marshes thread innumerable creeks and bayous which, with their deposits build up banks higher than the adjacent swamps where the moss-hung cypress towers. Upon these banks are settled the people who till the soil; though, most of all, these are crowded along the shores or coasts of the Great River, till its levees seem to protect one continuous, riparian village, shaded with orange and live oak trees, and blooming with roses. Then into these lower lands push the foot hills of the great Alleghany, or of the Western Upheaval, covered with pine forests, or rolling away in prairies, over which the Acadian spurs his Creole pony after his half wild herds, or in pursuit of the deer.

You may amplify this description with the tropical luxuriance of Cable, or of the Creoles, whom he attempts to depict; you may fill in all the details which shall present the material aspects of the country to the eye, and yet you are almost as far as ever from a knowledge of that inner life of the people, which is to furnish the secret cipher to the situation, and without which effort avails naught. Those who hold this key generally do so by virtue of a kinship in thought and sentiment, and are too often useless for help, because saturated with the same spirit which leaves the community almost as immobile as an oriental tribe.

It is a curious study to watch the impatient indignation with which a typical Northern enthusiast—one of those who so often expect to mend up the patches of the universe in one life-time—a really energetic doctrinaire—views the stolid content which he means to pierce through and destroy. He must learn that before this can be done he must be rid of the embarrassments of a foreign tongue, and of habits, which are not put on and off like slippers and dressing wrapper, but have come down by immemorial tradition, and have, through heredity, been grafted into the very flesh and bone. This applies to large numbers of persons of French descent. The theory of their church, too, almost, if not quite, prefers their ignorance to contact with undenominational schools, which are distrusted as heretical. Of course this is not universal, as many of our French and Catholic brethren in Louisiana combine the most active intelligence with the highest piety; but such is the tendency.

Below these, in ignorance, lies the great mass of the colored people. I cannot say that they are below the white people in their desire to improve. Therein is the hope for their amelioration. Under the Providence of God, with the equal chance now afforded them in the schools, through the laws and the spirit of equity—yes, of generosity—which animates all our people in Louisiana, we may look forward to the time when neither white nor black shall be the bondmen of ignorance. Until then we must endure all the evils imposed upon us by a ballot which votes, but does not read—much less think. But we do not despair. We know that there is a solution to the problem. We know the key.

Of course, every true teacher knows that there is but *one* master key to the human soul. It is love. It must open the heart; it must open the mind; at last, it opens the soul. In the case of the teacher we have to name it more specifically—sympathy. But what an appren-

ticeship this word implies ; what close relations, what a clear understanding of all the mental movements, what a powerful spiritual impulse!

You may imagine what difficulties intervene in many parts of Louisiana to prevent any general awakening, or the establishment of any effective system of education. When war comes into a country like this around us, the torch may level your cities, and the tread of the invader may leave a desert, but the kindly touch of nature causes your pastures to grow green again, and your fields to yield their increase. But in an alluvial country, protected by dykes and levees, when these are cut, an enemy more merciless than man invades the unhappy land. The walls of the fortress are broken down, and the destroyer enters. Water rules a waste ; and, when it retires, the marsh mud occupies its place. Pestilence and Famine follow in the track of war, and years do not repair the disasters of a day. Such has been the fate of Louisiana. War swept our State from end to end. Under the pounding of its hammer, everything was left a wreck—education with the rest. Floods and Pestilence and Poverty came after. But I am not here to recount her misery.

It is a sad and pitiful story, how, after war ceased, misgovernment did the rest. A more complete ruin cannot be portrayed. Everything like labor, social industry, and education was completely disorganized. Worse, hope itself was almost gone. The people became demoralized, in the sense of having neither the ability, nor the wish to rise. Thank God, that day is past. We have the wish, we have the hope, we feel in the thews and sinews of our social organization, the pulsations of returning health, of renewed strength, of a potency which shall rise supreme over every difficulty.

Did time permit, I think it would prove interesting to you for me to present some sketches of those historical beginnings of education in Louisiana, which are wafted down to us like the faint fragrance of the jasmine on the evening air. It would be a pleasing task to picture those gentle Ursulines, who, in the infancy of the colony—in the year 1727, a century and a half ago,—when it was the veriest babe of a state, by their pious teachings laid the foundations of a religious and ethical code, which was gradually to lend its grace to the Creole character. Nor would it be an unprofitable task to recall the labors of those learned ecclesiastics, who, in the spirit of consecration, gave their lives to the cause of sound learning and the greater glory of God. Narrow, indeed, must be the view which is not willing to accord them

all praise, because, though their aim was the same as our own, they differed in method and the *form* of their ideal.

It would be a pleasure to pause, and recall some pictures from the past—of gliding nun and black-robed priest, leading the infant steps of the old French Colony toward a better life. But this is not the occasion. There is work to do in the world; and we must move rapidly on, to show what this work is, and how it may be done. The work to which you are called, which interests you, and which we all believe is the great Archimedean lever which is to lift the world, is Public School Education.

Properly speaking, there was no such thing in Louisiana prior to 1841. Parish schools were provided, and small appropriations made for their support, but they were not free schools, and doled out the mere pittance of a pauper education to "eight indigent pupils" in each parish. In the Parish of Orleans the number gratuitously instructed was limited to one hundred and fifty. In 1841, the right and duty of maintaining free schools was imposed on the city of New Orleans; and, in 1845, a Department of Public Education was established by the Constitution. In 1847, Alexander Dimitry was made state superintendent—a man whose name is still honored in the annals of Southern education, for learning, vigor, and executive ability. Between that time, and the war, a system of public schools grew up in the State, and especially in the city of New Orleans, which bade fair in time to place Louisiana as the peer of older and richer commonwealths.

But if the public schools were inadequate in number, the same cannot be said of colleges and academies. Mr. E. H. Farrar, of New Orleans, in an able address on this topic, enumerated no less than eight colleges and twenty-four academies, in existence before the war, which received Legislative aid, and he did not exhaust the catalogue. He also states that not less than two millions of dollars were distributed for their maintenance. Three of the higher institutions still survive, much crippled; but the academies have passed away as the flower of the field. His forcible argument was intended to show that the scattering of resources was really a squandering of the public funds, and meant waste, inefficiency, and ruin, while concentration insured strength, stability, and eventual success. It would be hard to find a more pertinent illustration, and the lesson has its value elsewhere as well as in Louisiana.

I have said what war did for Louisiana. I have also told you

what peace did. I may add a word. The State had invested the proceeds of Congressional Land Grants and certain other property, in an inviolable perpetual fund, at six per cent. interest, which was dedicated to the support of the public schools. This fund amounted to \$1,130,867.51; this, independent of two other special educational funds amounting to \$436,000. In 1872, the entire assets of the former fund were sold to pay warrants which public opinion and the best jurists denounced as fraudulent. In a word, the treasury was pillaged, the little children were robbed of their birthright, and the spoilers not only went at large, but received the honors and support of the Federal Government.

What have been the consequences? In the years that have since rolled by, groaning under the burthen of heavy taxation, impoverished by repeated floods which destroyed the accumulations of many crops, afflicted by all the evils of an ignorant ballot, the public conscience has never recovered the strength to reassert itself, and by large, perhaps impossible sacrifices to make good this sacred obligation. But what better can we expect, with a body of voters, 49 per cent. of whom cannot read and write? These are our governors — the sovereign people. Must we not surely fall into a ditch, when the blind lead the blind? It must be recollected, however, that this electoral body was not created by our own choice, but is the free gift of the Federal Government.

Moreover, as I have said, our people are not prosperous. They scarcely know how to meet their present taxes. This is a serious matter with us. We wish to give a free education to all, white and black. But we hear these young, rich, and prosperous States of the Northwest, whose educational systems have been based upon the bounty of the Federal Government, saying to us, "If the Blair Bill passes, it will make mendicants of you all. Rely on yourselves alone." To us, it seems that such an argument should not be used by the beneficiaries of similar grants, or that, before using it, they should at least, on a fair adjustment of equities, return to the United States Treasury the value of the lands received by themselves. They can never repay the untold benefits of a fair start in the race of life, the gift of education, which opened the whole realm of thought to the humblest voter. Give us an equal showing. We do not ask it, *in forma pauperis*, but as a right. I need not remind you that the very spot on which we are now standing was once a part of the Territory of Louisiana.

But other powerful agencies are at work in Louisiana. The public schools of the city of New Orleans have shown a vitality that augurs well for their speedy advance and improvement. Through all the bitter past they have managed to keep alive, and they have now assumed an importance and evinced a usefulness which promises large results in the immediate future.

In a careful report made February 1, 1886, by Professor Ulric Bettison, chief superintendent of public schools in New Orleans, he estimates the number of children in that city, between 6 and 18 — the legal school age in Louisiana,—at 67,595. These are occupied as follows:

Number in Public Schools,	24,332
“ Private Schools,	16,399
“ Stores, Offices, etc.,	12,000
“ Home, or in the Streets,	14,864
	<hr/>
	67,595

There are 395 public school teachers, of whom only 21 are males. The average salary of grammar and primary school teachers is about \$46.50 per month. Colored teachers receive the same salaries as white teachers. For the year 1885, the expenditures for Public Schools were \$212,010.79. The Budget for 1886 was \$305,536.

Mr. Wm. O. Rogers was for many years the superintendent; and his zeal, tact, and executive ability have often had to supply the defects of poverty and misgovernment. He brought the water-logged vessel safely into port. His able successor, Mr. Ulric Bettison, under happier auspices and with a non political School Board, will, I confidently trust, develop the great work so auspiciously begun.

The Legislature, by encouraging established institutions of learning, such as the Louisiana State University at Baton Rouge, has shown good-will, which will ripen into sound fruit.

It has established a State Normal School at Natchitoches, which, under the intelligent supervision of Dr. Sheib, has made a good beginning for this most important work. “The minds of men are like so many candles which are lit one from another,” says Bishop Hall. And here is set up a candlestick in the darkness.

A State Educational Society, in New Orleans, has now for three years kept up its appeals to the people and to the Legislature, so to

amend their laws as to give efficiency to the public school system ; and, at last, both seem to respond. It has not ceased striving to stir public opinion, and to awaken it to a sense of our short-comings. We think we see day breaking. Everywhere the people are showing a wholesome discontent with the condition of affairs, and inquiring the way to better it. Before another census is taken, there will be a grand educational revolution in Louisiana.

Among the agencies which may, I trust, prove most efficient in redeeming the State from the low level on which undeniable statistics prove she stands, perhaps the most potent to-day is Tulane University. The bequest of one man, John McDonough, gave to the city of New Orleans the schoolhouses, which have made her public school system possible. With a still larger and wiser liberality, Paul Tulane, during his own life-time, has opened his heart and coffers, and with a free hand has given to the cause of education a princely benefaction. This donation yields \$75,000 per annum, every dollar of which is actively building up brain power, constructing a noble edifice of thought, doing vital educational work in the city of New Orleans. This grand giver is a native of New Jersey, but spent fifty years of active business life in New Orleans, where he accumulated a large fortune. About four years ago he began his donations, which are still going on.

I am sure that every teacher here will agree with me when I say that this philanthropist has shown a rare wisdom in his giving. It is much harder to give money than to leave it, especially as we cannot take it along where we are going. But it is also very much easier to receive money from the hand of the giver than from any one else. When it comes that way you get it. When it is left for executors, or trustees, or courts, to transfer it, you do not get it. You may get a part of it, after paying lawyers, and compromising with heirs, and waiting till the generation of children in whom the testator felt the most interest has spent its middle life, and grown gray in ignorance ; but you never get what he intended you to have. And then there are lost wills, and defects in authentication, and everything else—except the thing itself, the money, which moves the great machine. But here is a gentleman, who a little more than four years ago began his benefactions, and to-day he sees the university bearing his name with nearly 600 students in its medical, law, college, and high school departments, and over six hundred more in its free classes, and the hearers at its free lectures num-

bered by thousands. He sees a museum, worthy of a long established institution, evoked as if by magic, from the collections of the two great expositions in our city; and 20,000 volumes collected as the beginning of a library of the most comprehensive character and scope. Am I hasty in calling our benefactor wise?

Another point in which his example commends itself to those who like him would, in their own life-time, bestow of their bounty, and reap in blessings what they have sown in beneficence, is this. Mr. Tulane has given his donations to men selected by him for worth, prudence, and intelligence, almost unfettered by conditions. He chose his men with consummate judgment, and then confided to them with a perfect trust. Unlike so many old gentlemen who take one-sided views of education, he selected the object of his benefactions, and then left to his administrators the methods for making it useful and effective. He concentrated his means upon one object, the higher education of the white youth of Louisiana, and decided that their instruction should be Christian, but not sectarian; and then, with a most judicious letter of advice, vested an absolute title to his gift in the administrators of his donation.

This has left his administrators free to adapt their plans to the most pressing wants of our people, and to develop a comprehensive scheme of education, unhampered by personal preferences. I think it is not claiming too much for the work, present and prospective, of Tulane University, to say that in Louisiana it is looked upon as the most hopeful agency toward an early redemption of the State from the bondage of ignorance, which is depressing every industry, and paralyzing every energy.

In a convention of practical teachers, some account of this University, of the plan on which it is projected, and of the scope of its efforts, may not prove uninteresting. Be pleased in the first place then, to mark the conditions under which it has been founded and developed. We have, as I have said, in Louisiana, a population in which education is at the lowest ebb, though graced, it is true, in its older generation and more favored classes, by men who would ornament and dignify any community on earth; a million of people in hopeless discontent or apathetic ignorance, and yet with all the energies and activities of an American community, but unorganized and untrained. I might rather compare them, however, to *disbanded* soldiers, whose occupation is gone. An unfriendly tariff checks and strangles the industries it had invited into being; protection from

the ravages of the floods is dependent on political organizations and arrangements inadequate to the task ; in fine, we have a people, poor and discouraged ; but I may add, without boasting, endowed with uncommon intellectual gifts for practical life, as well as in the domain of esthetics and abstract thought. Now then, a large donation is made toward the higher education of these people. It is, of course, insufficient for the common school education of a whole people, even if it were not by its terms limited to their higher education. How is it to be employed so as to carry out the wishes of the donor, and at the same time do the most good ? Such was the problem presented to us.

And first, we had to ask, what is higher education ? Higher education must, in its potentiality at least, embrace the highest education, or it is nothing. I have said, heretofore, that diffusion of resources and means was equivalent to waste ; and concentration to effectiveness and success. It follows, then, that this fund, though not fully adequate to the work, must, of necessity, be used in creating a university ; for there, and there only, can be concentrated the full vigor of all the highest intellectual activities. But in the entire length and breadth of Louisiana, there was not one single person who could be properly graded as a university student, though there were many who were fair collegians in attainments and studies. The university had first to be established in order to create a demand for university culture. But while its professors stood waiting for the trained and equipped youth who should eventually be admitted to the university, it was plainly their duty, not to remain idle, but to lead onward through the discipline of a collegiate course those who might after a while be enrolled in the ranks of the highest liberal culture. A college on a broad foundation must underlie the university as one of its parts, where the training and discipline of thought should precede its active employment in lines of independent research. But where was this college to find its students ? The scores of academies and high schools, which had sprung up and flourished for a time before the war, had perished utterly. A few similar schools were struggling along, under many discouragements ; but not on such a basis that they could be built upon. As no system of high schools existed in the State, a high school became a logical necessity, as a substructure for the college, and as the broad foundation of the University, and one of its departments. This, too, would bring the University, by regular sequence and superposition,

into direct connection with the public schools, upon which in a well ordered system of instruction it should finally rest.

Now, if it shall seem to any of you, as very likely it may, that a high school is an anomaly as a department of a university, I beg to recall to your minds, the unity, the essential integrity of education. Education is the education of a person, an individual who preserves his identity through all his growth and development. Many persons receive their entire development under one set of influences; and, if we, in our public school system, transfer the growing youth from one agency to another, in the complex arrangements of favored communities, it is for reasons of convenience and expediency merely. But if it is expedient for one agency or institution to assume a large portion of the responsibility of the education of the youth, instead of leaving it to independent, and often jarring, agencies, there is no logical reason, at least, why it may not do so. The high school, the college, and the university afford, in fact, consecutive phases of instruction and development. One law governs all—conformity to nature in the evolution of the child and the man into highest manhood. After that, while it is necessary that they should be, in essential spirit, and in methods, organization, and discipline, sharply defined and differentiated, yet the grading and shading which mark the realms of nature are not to be disregarded even here. With each step in the progress of education, the reason is urged to a larger amplitude of action, and the will invited to a stronger self assertion. Hence a university which embraces within its scope a high school, as well as the still higher departments of college and strictly university education, can see to it that the preparation of its candidates shall be not only adequate in quantity and quality of knowledge but adjusted in all its parts with reasonable precision to the end in view.

Of course, where a state is so fortunate as to be able to exact from its lower graded institutions the full measure of the preparation demanded by the university, as is the case with the German Gymnasias and Real-Schools, this is preferable to the scheme pointed out, which merely attempts to approximate it. But there is nothing illogical in their union in one institution, so only that the grades be sharply and properly differentiated. But where no legitimate educational hierarchy can be established, surely it is not unadvisable for the university to give shape and tendency to its preparatory department, which may then serve as a model for other schools of the same

grade. Tulane University felt this necessity, and established a High school on a broad and liberal basis, as its lowest department.

Fortunately for the Tulane administrators and the people, the State had in the city of New Orleans an institution, the University of Louisiana, which, in its three departments of Medicine, Law, and Letters, had maintained itself for many years. Indeed, in the two former, it had for about half a century held a high rank, because of the learning and prestige of their faculties. A college and high school, constituting an academic department, was of more recent date, and was keeping up a manful struggle on scant resources, but with a faculty, young, zealous, and learned. To make a long story short, the Tulane Board, by a contract with the Legislature, took charge of this State institution, under the changed name of the Tulane University of Louisiana, and have remodelled it to suit what they considered the exigencies of the situation. Simply aiding the departments of law and medicine to perform more efficiently their legitimate functions, the Board expanded the academic department into a high school, a college, and a university, preserving a due regard to their logical sequence, and yet discriminating sharply in methods, discipline, and spirit between them. The high school pupil is taught and treated as a boy; the collegian as a youth of manly aspiration and a capacity for self control, but still intellectually in the formative period, and properly under the discipline of his teachers; while the university student is regarded as a man. He has no master. His professor is his leader and guide, by a due concession to age, experience, office, learning, and genius. The student is urged to think for himself, to accept nothing, to attempt boldly to find new paths of knowledge; and this advice, which would have been futile at an earlier stage, now becomes possible. In a word, the Tulane University undertakes the full measure of the work I have tried to explain and justify.

There is nothing new in this theory, and perhaps we have been exceptionally fortunate in being able to adopt it in its logical completeness, unfettered as we are by binding traditions. But I have wondered why some of the great universities of this country, instead of wrangling over petty details as to electives in this class and electives in that, do not speak out clearly and sharply on this point. They should say, "These classes are college classes; their purpose is disciplinary; and our experience warrants us in designating and prescribing what their studies shall be; we have no elective

studies in our prescribed courses." And again, "Above these classes is the University. In it are none save men qualified to elect their studies for themselves absolutely; but our degrees require such and such studies, or so much of study, and those who seek them must fulfill the requirements." This would greatly simplify the whole matter, and I cannot see any serious difficulties in it, though doubtless they exist. Take Harvard. Why can it not drop its freshman class, or even part of its sophomore, and after a rigid examination, admit only university students to its University courses, to which its junior and senior, as well as its post-graduate classes properly belong? If the high schools and colleges of New England cannot send students to it equipped for such purely university work, then houses, or colleges, established within its precincts, could do the requisite collegiate work, and leave the grand old Queen to the exercise of her truly royal functions and prerogatives in the realm of Knowledge—research, conservation, independent thought, and liberal culture. The Johns Hopkins University alone, among our stronger institutions, seems to have dared to assume this advanced, but impregnable position. The others will come to it.

But, if the University is thus to take the youth by the hand at the threshold of life, and lead him up the steep ascents of thought to that rare atmosphere where he may breathe the pure air of truth, and with commanding vision scan an ever widening horizon that fills him with increasing awe at the infinitudes beyond, the question arises by what roads shall it proceed, and how is he to be trained for this strenuous undertaking? What is this education which is to be given? what its ideal?

Happily, as to fundamental principles our profession is in accord, whatever may be our differences as to their application. All agree that the ideal of education consists in the harmonious evolution of man, in his threefold nature, physical, intellectual, and moral. Any system which fails to take into account any one of these three conditions of being is worse than useless, for it distorts by abnormal development what might become, left to itself and nature and its environment, a wholesome, though low form of spiritual life; as we see an Arab Sheikh, or savage chief, in his own sphere, commanding the admiration of the civilized and philosophic observer. The harmonious and equable evolution and development of a man in all his faculties of body, mind, and soul,—this is our object. The making of a man, the bringing out whatever is in him in the highest perfection of

material form, reason, and character, of which it is capable, this is education. I say, whatever is in him, because nothing short of omnipotence can do more. But I do not say what is visible in him, unless to the eye of faith, which in the germ can perceive the blade, the stalk, and the full ear of corn.

But the harmonious and equable evolution of a man does not imply that he must have the same or equal development with his fellow. The harmony must be within the individual. Society, as a whole, in any community, can only find its fullest educational expression by each individual attaining the maximum of his possibilities in the direction of his own personal aptitudes. The ultimate generalization of these forces would result in the perfectibility of the human race, the consideration of which may be postponed until after the next presidential election.

If each man were harmoniously developed in the direction of his own aptitudes the result would be an infinite diversity in purpose and power. The more thorough the education, the wider would be the diversity. If civilization has any synonym, it is "complexity." One of the objections urged against the public school system is that its products are after a pattern. Wherever this is found to be true, it will be discovered that the spirit of free thought—of a true educational method—has been overlaid and temporarily stifled by some fashionable routine or educational ritual. Every system is, must be to some extent, open to this same objection; because it is a system; but this, least of all. Fears of monotony or stagnation resulting from our public school system are groundless. The diverse origin and pronounced individualism of our population, the division and subdivision of labor, the tremendous expansion of industrial energy, our State governments and the extreme freedom of our social organization and arrangements are a sufficient counterpoise. Enough specialization of function will result without organized effort to that end.

It is our duty then, while duly regarding native aptitudes, to see that the development of the individual man shall be harmonious; that it shall be properly adjusted and rounded, instead of one sided. As far as it goes, it should permit, at least, corresponding growth in mind, body, and soul. Regard should be had to this from the beginning, and attention given to it until the end, until the highest culture of our best balanced youths is fully achieved.

We all advocate and project this theory of harmonious develop-

ment, and then practically relegate it to the realm of "the sweet by and by," as a beautiful dream. Usually, we adopt in practice the fashion of the Flat Head Indians, who cramp and squeeze skull and brain and character into abnormal and grotesque shapes and types. And so we have a lawyer, or preacher, or mechanic, or engineer; but the man—where is he?

But it may be asked, "Is this problem then so easy, that it must be insisted upon as a present condition?" Easy! No! If it were easy, it would have been worked out long ago. All the easy things have been done. They are finished. It is our business to take up the hard problems of life, and solve them. Inter-oceanic railways, submarine cables, the electric light, and the telephone involve large and difficult enterprises. But these material weapons wielded by the arm of the Spirit are but toys, playthings, compared to the organization for righteousness of the intellectual and spiritual forces of man. Yet this is our work, fellow teachers; to take the crude mass of humanity, and transform its atoms into men; each man a whole man, sphered in his completeness for and against the universe. The very best we can do will give but a faint reflection, a broken and imperfect image, of the human-divine ideal. But it will be more, better, truer, than any product of the Flat-Head theory of amelioration by specialization of function merely; for man is more than function.

The education I have tried to shadow forth calls every faculty into activity, and touches every chord of being. The life of each man should be a symphony; and whether a triumphal march, or some faint pleading on a minor key, harmony should reign. If this be so, no part of his nature should be left to cold neglect. But when you would evoke from harp, or pealing organ, some grand burst of music, it is not by pressing with equal finger every string or key, but by the concord of sweet sounds, responsive to the call of the spirit and the mastery of the skillful hand. And so a man is set to music, not by the grinding of a crank, but by bringing into play every part of his nature, and yet by so dwelling on and sounding the key-note and dominant chords that the air shall prevail, by so employing his best aptitudes that his highest manhood shall always control the movement of his life.

The end then is plain; the harmonious evolution of a man, with due regard to his strongest points. But how? Ah, that *how* is a great question! Is there any one road for all? Some claim that there

is, but I think not. When Socrates enumerated the accomplishments of Alcibiades, the pink of Athenian culture, reading, writing, and wrestling, the three Grecian R's, and added to them music, he meant to include the whole course of what we call university education. But he forgot to mention that Alcibiades had breathed the keen and bracing air of Attic thought from his birth, and that he had reasoned with Socrates. This was in itself a grand education. It made Plato Plato, but Alcibiades remained Alcibiades. Nurture composes her epigram, but Nature always has her repartee. But after all, such an education involved the threefold training I have suggested, and aimed chiefly to develop character.

All organization is in one sense mechanism, and so we may liken an educational system to a machine. But what would the men of Lynn say if a great shoe syndicate should turn out shoes of one size and pattern only, and demand that all the world should wear them? They know that the demand would meet a flatfooted refusal on the ground that *they will not fit*. When urged to believe that the classic buskin—a little Latin and less Greek—is for every foot the best, as Lord Eldon said, "I doubt." And when a scientific curriculum is thrust forward—French patent leather—as the sole support of the advancing step of progress, I cannot but remember that Philosophy has her airy realms, trodden only by the wing-tipped sandals of Hermes. And when again, last of all, comes the young giant, Manual Training, with his seven-league boots, shouting, "Come all ye sons of men, and wear these boots, and with them compass land and sea. They are the best and biggest and *onliest* boots of all", the scholar fain would ask, "And will these wonderful boots lift you to the upper realm of thought? Land and sea! Yes, it is true, they may compass these; but Heaven, and the Heaven of Heavens, what of them?"

No, my friends, though all men must be shod, there is no shoe that will fit every foot. The foot must be regarded, the path it has to tread, the work it has to do. Pardon the homely apologue, but we must not forget that the peculiar aptitudes of each person will naturally draw him into certain lines of study, which should be provided for, and these are not the same for each individual. While all the faculties should be brought into activity, the special endowments, and the strongest tendency of a person should be encouraged and stimulated to perfect themselves.

In the lower grades of education, its elementary phases, a simple

course of reading, writing, and arithmetic suffices for mental gymnastics. But the lines of study diverge as they rise, until in the German University we might behold chairs devoted to the exposition of Aristotle, or Thomas Aquinas, or Hegel, or Gambrinus, to embryology or earthquakes, or to the customs of the Vandals, or of the Philistines. Up, out of the bedrock of barbaric ignorance, through the superincumbent strata of what, by courtesy, we call civilization, springs the aspiring tree of education. As it rises, it ramifies, branching into bough and twig, and fringing into leaf and feathery frond. But life and nourishment are drawn both from its deep-piercing taproot, and from the foliage which flourishes in the free air of liberal culture.

The practical method by which the student is to obtain a harmonious evolution, and yet preserve and hold on to his own special tendency may be partially realized at least, in a series of logical and well-adjusted curriculums. An institution may be strong enough to take up one curriculum only of such a series, and it is not to be blamed for not attempting more than it can perform. It may restrict itself without reproach to a course of which classic culture is the backbone. Or it may make the sciences its chief object, or their industrial applications its main end. If it has the strength and resources, it may undertake several, but the point I desire to make is that, whatever curriculum or curriculums it may determine to teach, due regard shall be paid in each to all the faculties which make up a man. While its main tendency may be strongly emphasized in each course of study, closely related faculties and functions, which though subsidiary are imperative, must not be neglected. The hand shall not say to the eye, "I do not need thee"; nor the eye to the stomach, "I do not need thee." And, as the student rises in knowledge and maturity of thought, he should find the range of studies selected for him wider, and more and more exactly adapted to the purpose of his life and his intended pursuits. A series of equivalent curriculums leading to a single baccalaureate degree would embody the plan I have tried to sketch for you, and which has been adopted in Tulane College.

In the education of which I have spoken, the outcome most to be sought is character. The moral side of our nature, soul culture, is the final aim of education. But two points should be remembered by educators respecting moral culture: 1st, how much of it is outside of the school; 2d, how much of it in the school is outside of

books, outside of precept even. We all know how far the education of the environment transcends formal instruction. Socrates called attention to it. The home, the church, the shop, the street, the newspaper, the theatre, are all schools, and their faculties are teaching and preaching righteousness, or diabolism with voices that ring through all our waking hours. Indeed a greater part of the responsibility of the moral education of the student is, in a city university, lifted from its authorities, and rested, where it belongs, on the family. In conventual life, and institutions which imitate it, this responsibility is more or less fully assumed, with results not pertinent to this discussion. But after all, no social organization has been devised by man equal to the divinely ordained institution of the family for bringing out all that is best in human character.

In framing any course of study, the distinct value of formal instruction in ethics should be duly recognized. Express ethical teaching should be done in every stage of education, adapted, of course, to the age and capacity of the learner. He should know its formulas and standards, in such a way that the mind recurs to them unconsciously, and he should have a reason for the faith that is in him. But the most vitalizing, the most inspiring lessons received by youth are caught from the noble literature of the past, and still more from the present examples of the lives about us. We can trust much, too, to mere intellectual training. Its effect on the moral education, on character evolution, is immense. Its disciplinary processes are continually at work building up character. Very much of this is implicit; the best part indeed. It is implicit in the teaching, the demeanor, the lives, of a faculty; in the liberal tone of academic life; in the culture which comes of ploughing with the sacred oxen the fertile fields of Apollo and the Muses.

But what finally determines health and growth of soul in the student is the moral atmosphere of the schoolroom. Every one who breathes it feels its bracing or debilitating effects. There are schools where a habitual insincerity broods like a miasm, tainting the very life blood. Such a place breeds shams. There are institutions which cultivate a conventional morality or immorality, a permitted duplicity, a condoned equivocation, an accepted grossness of language and thought, a brutality regarded as venial, or some other form of moral obliquity. Depend upon it, the poison will break out in after years like some forgotten plague spot which at last bursts forth as the breeder of pestilence.

Hence the main thing in the ethical training of a school is to keep its moral atmosphere pure and healthful; bright with the light of truth, breezy with the manly virtues of courage, frankness, industry, energy, and independence; balmy with the incense breathing air of courtesy, and gentle grace and kindly charity. If such be its happy case, the conduct will be attained at which we aim, conduct that is noble, true and God-fearing.

For the reasons already given, most of the formal work of the school is directed to the intellectual training of its students. But why do I say *training*? The reply is not necessary in this well-informed audience. "The intellect," says Aristotle, in one passage, "is perfected, not by knowledge, but by activity." And in another he says, "The arts and sciences are powers, but every power exists only for the sake of action; the end of philosophy, therefore, is not knowledge, but the energy conversant about knowledge." You will • all agree that fact cramming—mind-stuffing—is not education; but that those studies which incite the mind to inquire, and discipline it to judge correctly, are the true implements of education. And these studies must represent and be adjusted to the different sides of man's many-sided nature. Sides did I say? We may so phrase it, but the nature of man, and the corresponding realm of knowledge, present themselves not as a polygon, nor even as a circle, but as a sphere. Every faculty in its exercise, every thought in its finality, every science in its overlappings, returns into itself through a multitude of relations. If you shall ever try to exhibit in diagram a *circle* of knowledge, you will speedily realize its insufficiency. The sphere is an infinitude of circles, yet, it, too, fails to express the totality of even human knowledge. God's knowledge has no terms of expression in man's speech or thought, for even the perfect sphere is finite.

But speaking in types, we may, with our orb of knowledge, make for ourselves a geography of the knowable. Man we may place at one pole, and Nature at the other. And around the pole of Nature lies the ocean of science, while about man as a centre lies the ocean of Philosophy—man contemplating himself. About the broad equatorial belt of History—man's true record of whatever is general, important, and ascertained in the living past of humanity—are grouped continents and islands; the sciences and sub-sciences; the knowledges and sub-knowledges; the arts, trades, and all floating facts. Enveloping all, as does the atmosphere the earth to which it

belongs, is speech, in which man thinks ; and spiritualizing the word is thought, which is the light from above, without which there is nought.

But if the All-Knowledge of humanity is thus globed, and the nature of man is like unto it, how is he to image that macrocosm in his microcosm? Even as the dew-drop does the star. All the great provinces of knowledge must be represented in his studies. A mastery of the mother tongue, the vehicle of thought, the crystal vase that contains the elixir of life, is more than an accomplishment, it is a necessity for education. It is the implement, the garb, the very body of thought, which is spiritual and divine. But aside from this transcendent consideration, the secondary values of language studies are unequalled. The most finished educational machines yet devised by the ingenuity of man are Latin and Greek as studied. In these work-shops, the mind, bare-armed and with girded tunic, brings every intellectual muscle into play, observation, comparison, imagination, memory, analysis, synthesis, and, by iteration and repetition, by a thousand gentle taps of hammer and chisel, not only fashions out a form of speech, but grows to a masterful manhood, so that he who in our yesterdays was but a hewer of stone finds himself at last a Phidias. For the abstract thinker, I put, as preparation, Latin and Greek, first of all.

But many will not accept higher education on the condition of receiving it through Latin and Greek. And their refusal indicates a defect in this scheme of study when applied to persons intending to pursue certain directions in life. They claim that they are hindered, not helped, by it. But they cannot claim that they are hurt by language studies as such, but only that they do not receive an equivalent for the time spent ; and the modern languages may therefore serve as ancillary to that side of their education.

No system, I believe, pretends to omit mathematics. Both for discipline, and, in its applications, for utility, it has a central place in every curriculum. Time will not permit me to enter on a discussion of the value of scientific studies, and moreover you are familiar with it. Suffice it to say, they represent a continent in our geography of the knowable. Covering so many provinces of positive knowledge, and enlisting so many of our faculties in their acquisition, they must be fairly represented in any judicious course of study. We have at Tulane University, in our six college courses, tried so to adjust the studies that the mother tongue and mathematics shall be everywhere

present, and that languages, the sciences, and philosophy, in its various forms, shall appear in every course, for training, as well as for information.

But body, as well as intellect and character, has to be cared for in a duly adjusted education. In city institutions, fortunately, much of the physical education, as well of the moral culture is modified and directed by home influence. But a youth in the city, except in very favored cases, has not the advantages of the country boy. There is no teacher like Nature. The handwriting of God is upon every page of the great book, and he that runs may read. In a city, athletic sports, the play-ground, the gymnasium, when wisely conducted, all have their appointed place. The only dispute about them among educators will be as to details. But there is a living question, one of the issues of the day, bearing upon physical culture, though it has other aspects; I mean manual training. And here I may say I heartily concur in the philosophical principles set forth on this topic, by Dr. Peabody, a few days ago.

Manual training, as educating both eye and hand, is properly classed under physical culture, but it has other values hardly sufficiently understood. Without depreciating military drill, or the exercise of the gymnasium, I prefer the workshop for physical culture. Monotony is the curse of the two former. They give neither play nor work, but drill; practice of muscle merely, not the exercise of mind or will. They effect the subjugation of volition to arbitrary rules, the conversion of manhood into mechanism. It is all right, with the end in view; but the man is to be made a machine, the company a more complex machine. But in manual training, the object is altogether different. There the student is putting ideas into material forms. The dullest boy has to think. He is realizing thought in concrete things. When he draws his working plan from a visible object by representation or projection, he idealizes matter. When from that plan he executes his design he is transforming thought into its concrete image. These are high rationalizing processes, and the subjective, as well as the objective, discipline is important. When to the sense of utility he adds the conception of beauty, the artisan becomes an artist.

Watching a game of billiards I have often been struck by the great amount of gentle, yet developing, exercise it affords. But the play of muscle, the variety of posture, the frequent change of attitude in the workshop, under as constant an intellectual stimulus at least, is superior to it. The work-bench beats the billiard table for

calisthenics. No one can witness the keen curiosity, the vivacity and good humor, and the ready intelligence of the high school workshop, without feeling that a step has been taken in advance in education. The students study better. They behave better. The reason is obvious. In this manual labor they let off steam. The accumulated nervous energy of the day is transformed into a visible product of the boy's wit and will. His mechanical aptitudes have got beyond the crooked pin. He is a doer.

Without detaining you on the details of our system, I may briefly state in what our theory differs from that of the Massachusetts Institute of Technology, and the Washington University, with which I must presume you to be familiar. In the first place, our manual Training School is not a separate department of the University, but is its mechanical workshop or laboratory. Its instruction is compulsory on all who enter the high school, with a very few exceptions. Out of 284 students in high school and college this year, about 220 received this instruction. This is for training more than for mere knowledge. It is the laboratory of the high school especially, and the primary department of the technical courses, where the mechanical student will learn the alphabet of wood and iron, and how to spell and read and express his own thoughts in things as well as in words.

This then, ladies and gentlemen, is the work we are trying to do at Tulane University. Its beginnings are auspicious. So far, popular favor and general commendation have crowned our efforts. The people of New Orleans and the State believe we are doing a good and useful work, and are heartily co-operating with us in it. Our museum and library are growing rapidly. It is generally understood that if anybody has anything to give, that the University is a good place to send it. A spirit of hope and confidence has taken possession of our people. They look for better things. They are willing to strive for them. It is no human effort that has achieved all this. It is the day-spring from on high which opened the heart of Paul Tulane with its quickening ray. Love for his fellow-man touched that large and bountiful heart, and it poured forth its flood of beneficence, which like a burst of sunshine, brightens all our land. Under its benign influence we look forward to see the stricken State bloom like the lotus on its marshy bed, with the beauty, and splendor and fragrance of thought and culture. I know that your kind wishes, my fellow-teachers, will be with us in the aspiration and the effort, and that you will not grudge us one inch we may gain in that strenuous race where the last strives to be first. I thank you for your patience.

THE PROBLEM OF RACE EDUCATION IN THE UNITED STATES.

I.—THE RESULTS OF EDUCATION IN THE INDIAN TERRITORY.

BY ROBERT L. OWEN, LATE SECRETARY OF THE CHEROKEE BOARD OF EDUCATION.

Mr. President, Ladies, and Gentlemen:

There is perhaps not a word in the English language of wider difference of meaning in all that is good, in all that is bad, as it is accepted by one class or another, than the word, Indian. One child pictures to his frightened imagination a copper-colored, roman-nosed, sharp-chinned, fiery-eyed, feather-crested monster, whose chief delight is the torture of babes and innocents. To another it may mean a tender, kind, and faithful father or brother. There are Indians who are utterly savage, barbarous, and the mortal enemy of the white man, represented now by an exceedingly small number. There are others who are refined, educated, Christian gentlemen, worthy to enter any society which the world affords.

I have been invited to direct your attention to the five civilized nations as illustrating the results of race education.

As in my ancient geography I saw the five races of man pictured each by a single head from the Caucasian, the Indian, the Mongolian, the Malay, and the African races, so from the five Indian nations I choose the face of the Cherokee Nation to present to you, hoping thus to give you by a single portraiture a fair likeness of the family.

It has been the habit of American speakers to romance more or less in dealing with the Indian, either as a picturesque, poetic spirit, dreaming over his departed grandeur and the graves of his forefathers, or, on the other hand, with speakers from the frontier, as a blood-thirsty and utterly unreasonable barbarian, who was only a good Indian when

he had gone to reside with those forefathers. I beg you to believe that I will a plain, unvarnished tale deliver, and show you the Indian as illustrated by the Cherokees precisely as I have seen and known them. I have lived with them a number of years, and almost all my near relations are citizens of the Cherokee Nation by blood.

The education of a race is accomplished not alone by those most potent factors in the fields of modern education, the worthy school-master, the illustrious professor, the devoted missionary and religious teacher, but also by its battles on the frontier, by the treaties it makes, by the laws it passes, by its contact in a thousand ways with other races, with foreign lines of thought, by its own divided political opinions, its own arguments, and all that goes to make up its daily life and produce that development, which places them upon the rising scale of intelligence and Christian feeling, which we designate education. The results of this race education, as shown by the five civilized nations, is very wonderful when we compare their lives with the lives of other savage communities thrown in contact with civilized nations. It took the Briton five centuries to accomplish what they have attained in one century.

In the space of a single human life these nations have come up out of barbarism and heathenism into a state of comparative civilization and into the light of Christian life. They have laid aside the blanket, the paint, the leggins, the gee string and clout, and have adopted throughout the community the garb of civilized man. This they have not done by act of Congress, but one by one the Coot-las (scalp locks) fell under the influence of new thoughts found to be better than their old thoughts, and the individuals composing the community were changed. It is not unlikely that if an Act of Congress had been passed declaring that the scalp lock should not be worn, every Indian would now have a scalp lock twisted under his hat. I mean by this that the Indian is of passionate individual pride, and his act must be the result of his own thought, or what he believes to be his own thought. He can be led but will most vigorously resist compulsion or dictation. Many Indians, even in the five nations, pretend to despise the white man, whereas they secretly admire him, and are constantly intermarrying, and adopting his ideas, plans, customs, and laws. They will not accept his thoughts or advice, or his teaching, unless they thoroughly understand it, but having accepted it and made it their own, they retain it with the greatest pertinacity. The Christian religion had much serious difficulty in getting a foot-hold, but once established,

it became permanent, and now the five nations are extremely religious. There are over three hundred native preachers among the five nations, only a small number having regular congregations, but all preaching when convenient occasions are presented in their neighborhood.

Great credulity becomes great incredulity, and a strong tendency to trust is followed by a strong disinclination to trust. The wild Indian follows his chief implicitly; once deceived, his utter trust becomes utter distrust. He then refuses to believe from that person the proposition that two and three make five. The Indians have been many times deceived in making treaties, and it is common to inveigh against the Government — the deception of her agents. These deceptions have usually been verbal promises, influencing the mind of the Indian as a written treaty whose words alone are binding. It took the five nations fifty years to learn this, but they learned it well, and their more recent treaties leave nothing to be said, and their title has been placed in the form of patent. But the promises themselves were frequently broken or modified by new agreements that were practically compulsory, and in the most notable event in Cherokee history — their removal from east of the Mississippi River to the west — they were compelled to observe a treaty that was fraudulent and against which 16,000 Cherokees solemnly protested, in vain. These things all left a deep distrust of the General Government in the minds and hearts of the Cherokees and has engraved a deep mark on the character of the people, upon their legislation, upon their finances, and upon their social life; a feeling of distrust increased as they see the number of bills introduced in every Congress for the plain purpose of legislative robbery, although they come wearing the livery of heaven in all cases, — under the guise of philanthropy, public necessity, homes for the patriotic and battle scarred veteran who has saved the republic, in the hour of its peril, from destruction, — under the guise of educating and civilizing the poor, untutored Indian and making a valuable citizen of him, etc., etc., but really for the purpose of getting a large tract of valuable country at the usual government rate of \$1.25 per acre — with the declared purpose of giving the Indian 160 acres of his own land and the real purpose of selling the remainder of his land for him at one tenth of its value, to the speculators who are lobbying the bill apparently in the interest of the Indian, but against the vehement protest of the untutored man who does not want to be civilized in that manner. Again they are encouraged by the association formed by the honesty and integrity of America, in treaty keeping associations, and

by many strong, upright spirits in the Senate and Congress of the United States, who have spoken against the various attempts to rob them of their rights, and by the prompt action of the Executive Department in saving their property from violent appropriation at the hands of the hungry and misled "boomer." An act of diplomacy may here be mentioned as indicating this distrust and showing at once the shrewdness of the Cherokees. One of the strong arguments made by their leaders in leasing the Cherokee Strip to the cattle-men, was that the cattle-men would industriously and vigorously preach the gospel of the Cherokee title along the border of Kansas, which they have most devoutly done. It would not have been necessary to neutralize the boomer with the cattle interest, if the Cherokees had felt entirely safe, as they ought to feel, having a perfect title.

The material condition of the Cherokee people would probably greatly surprise those accustomed to think of the Indians as wild men, living in the teepee on jerked buffalo.

Entering the Cherokee Nation by the Missouri Pacific Railway, one first sees Vinita, a town of a thousand people, surrounded by farms with a number of respectable stores of stone, brick, and frame, well stocked, conducted in all cases by citizens of the Cherokee Nation, either by blood or adoption, under license from the Cherokee Council, under the control in a more local sense of a corporation, chartered by Act of the Cherokee Council, and known as the *Town of Downingville*. The town has mayor, council, clerk, treasurer, marshal, calaboose, etc., etc. One sees in the town four churches; the Cherokee public schoolhouse, a large, two-story, white building with ample room to accommodate two hundred day scholars—Worcester Academy, a handsome and well conducted high school, etc. There are a number of cottages in the town that would compare favorably with those seen in the adjacent towns in the state of Kansas, and the grounds about them are shaded with trees and ornamented with flowers. Look at a Kansas town of a thousand inhabitants and you see Vinita. The people dress the same, have the same music, read the same papers, listen to the same preaching and teaching, visit each other in a similar manner, follow the same fashions, do an equal amount of gossiping, the boys talk base ball—the schoolgirls chew gum. It will be absolutely necessary to leave Vinita to find a distinctive feature, excepting the dark complexion of some of the people. Most of the full-blood population live east of the Grand or Neosho River and there you must go to find them. Passing toward the southeast, over undulating

prairies, with belts of woodland lying along the streams and crowning the hills, we see farm after farm of considerable size,—which rarely join fences, being from one-quarter to one-half a mile apart in nearly all cases,—containing from fifty to four or five hundred acres; and in the houses that we pass live half-breed Cherokees, adopted citizens, and some full-bloods. These houses we find comfortable, sometimes tasteful and commodious frame buildings, sometimes double log houses with suitable out-buildings, giving sufficient shelter for the protection and comfort of the inmates in all kinds of weather. The furniture is for the most part from eastern and northern factories. The crockery, such as would be seen in ordinary farm kitchens, the cooking the same,—the inevitable frying pan and the saleratus box for the manufacture of soul distressing biscuit,—and indeed but little to indicate the difference from a Kansas farm. The orchards are set out. The water is generally obtained from wells, sometimes supplied with a pump, more frequently with buckets united by a common rope passing over a wheel suspended on an upright frame. The fences are of plank and wire, and good rail fences. The fence declared lawful must be four and one-half feet high, constructed of posts placed not exceeding eight feet apart, and securely set two feet in the ground, and properly boarded with sawed plank, or split rails in good repair. Worm fences must be four and a half feet high, securely staked and ridged, and in good repair. Crossing the Grand River we get among the full-blood people. We find them living on the streams, in the hilly country, a choice doubtless fixed by their old associations with the mountains of Tennessee and Carolina,—associations too strong as yet to be overcome in their conservative hearts by the influences impelling the half-breeds,—by the influence of modern thought, modern wants, which, with the half-breeds have become necessities, and have stimulated them to a vigorous assault upon the prairies to make them yield up their valuable products to supply the family needs.

We find the full-blood living occasionally, in a frame house, but generally in a double log cabin with log out-houses, with small fields in the valleys of the streams, fenced with a worm fence, the fields of various sizes of from four or five to fifty and occasionally a hundred acres. He gets his water from a spring and not from a well as on the prairies, but he has a cook-stove, and he, too, is absurd enough to use saleratus in Western style. He has around him a number of cattle branded with his brand, and marked with his mark, a number of hogs which furnish his annual supply of meat. He raises beans, potatoes, and vegetables, enough corn for his own supply of meal and hominy,

enough to feed his horses and fatten his hogs which are for the most part fed upon the mast of the woods adjacent, and to some extent supply his less provident neighbor, in case his food runs short, which occasionally happens, if the season be not fair. There are other full-bloods who have but a single log house, with perhaps a single store house, and a very diminutive crib, who live in the humblest manner, being content with their daily food, and equally satisfied, when their own cribs have been emptied, to borrow of their neighbors what they need for their supply. The full-bloods are very liberal to each other and are quite willing to lend. This willingness to give and willingness to receive, presents a serious obstacle to the utilization of nature's great lesson,—hunger. They get along reasonably well in a humble way, rather to the disappointment of their ambitious brothers, who would like to see them make greater exertion to surround themselves with the same comforts of life which they enjoy. There are no people more hospitable in proportion to their means, than the full-blood Cherokees. They will get out and give you their best bed and sleep on the pallet.

An actual census in a population of over 20,000, six years ago, showed but five individuals who made their living by hunting and fishing, the others being farmers, horse and cattle raisers, mechanics, teachers, preachers, etc., pursuing those vocations which are usual in the communities of the adjacent states, except the saloon keeper. The community being strictly prohibitionist.

Nearly all Cherokee children, when young, are given by their parents or friends a calf or two, or a colt or two, partly to please the child in the sense of proprietorship, but partly perhaps with the wise foresight as to his future accumulation. These young animals are watched over by his elders, or by the child himself, and grow up and increase, and when the child arrives at his majority he finds himself with some property. The keeping costs nothing, having a free range on which to live, and the attention given to the animals instructs the child in one of the most valuable lessons of life, as well as secures, at the time of his majority, a reasonable start in property.

Nearly all full-blood families are provided with a wagon, plenty of horses to do their work and on which to indulge their fondness for riding around to see their neighbors, employment which in the states would be designated "loafing," although in this intercommunication they keep the run of their cattle and swine, disseminate news of interest, and do a vast amount of small political electioneering.

The number of cattle in the Cherokee Nation would probably average ten head to the individual, or 200,000 head. The number of the family ranging from a few milch cows up to a thousand head. Quite a large number of persons have between one and five hundred head, and these herds are increasing. The material welfare of these people is the more striking, when we reflect that some twenty years before the war they were moved at the point of the bayonet from their homes in Georgia, where a state legislature passed the most oppressive and unjust laws and enforced them, in violation of the Federal treaty with these people. The General Government permitted, if not encouraged and abetted, a political error which had subsequently to be corrected at a loss of a million lives. If the Cherokees had looked to God to avenge their wrongs they would have seen in the war of the rebellion a bloody retribution. Nations as individuals pay the penalty of error. This removal, however, cost the Cherokees nearly all the property they had. Their suffering was frightful. They were not only not able to protect their property, but were unable to protect their own lives and the lives of their children from destruction in this removal. They are estimated to have lost one-third of their people. They were not excused from marching on account of sickness, and when seriously ill were placed in wagons and hauled on in the heat and dust by the military; and if the missionaries are to be believed, women bore children in the dusty road on this march, unprotected and under circumstances where their friends were unable to give them protection or assistance except in the rudest possible way. It is sufficient to say that they came into the wilderness, leaving their old homes behind them, made new homes in the west, began to acquire property, and in twenty years had become comparatively wealthy. Then the war of the Rebellion came on. They protested neutrality—implored neutrality. General Albert Pike, representing the Southern Confederacy, practically compelled them to make treaties with the Confederate States, the United States having withdrawn her forces from the Territory and left the Cherokee Nation without the protection guaranteed by treaty. The full-blood Cherokees formed a select league called Kato-whah,—a society in which the members pledged themselves to stand together like brothers, for mutual protection. The half-breeds owned some 3,000 negroes. They kept faith with Gen. Pike and fought on the Southern side. The full-bloods organized, under Confederate commissions, two regiments, and being fully equipped,

remembering Georgia, marched North with Confederate colors and Federal hearts to fight for the Union. The Cherokee Nation was split asunder, and a bloody war followed, in which the Cherokees fought each other under the black flag, leaving bitter feuds which are not yet entirely extinguished, except upon the surface. Their cattle and horses were consumed, their homes burned, and they were thrown back twenty years, just where they had started from—a condition of poverty that was extreme. In the twenty years which have elapsed since, they have once more acquired a moderate competence and are rapidly getting to be wealthy. They are using white laborers by the thousand, and availing themselves of their landed rights. The fields on the prairies are getting very numerous, they are growing very large, and they are cultivated with modern machinery. The first steam plow I ever saw, was in the Cherokee Nation on a Cherokee farm. The principal thing these people ask and desire is to be let alone, under the pledges of the Government to protect them in the enjoyment of their property, and of their self government.

The government of the Cherokee Nation is shaped exactly on the plan of a state government. The treaties being declared in their constitution to be the supreme law of the land, being obligated to pass no laws in violation thereof, or of such intercourse laws as may rightfully be passed by the United States Government, construed in the light of said treaties. Religious tolerance is secured, and rights of person and property protected. Article 2d, Section *one*, of the Cherokee Constitution declares the power of this Government shall be divided into three distinct departments:—the Legislative, Executive, and Judicial. Section two, No person or persons belonging to either one of these Departments shall exercise any of the powers properly belonging to either of the others, except in the cases hereinafter expressly directed and permitted.

The principal chief of the Cherokee Nation is simply a governor, with all of the functions which attach to that office, with the pardoning power, the right to veto, etc. He may be impeached as the governor of a state may be impeached. The executive office of the Cherokee Nation is thoroughly well managed. The Chief has four secretaries who are constantly employed in keeping a record of its affairs, and managing the enormous business of the Cherokee Nation. As creditable documents issue from this little office as from the State governors. Every letter received is briefed, registered,

and placed on the letter record book, which has a double index of time, name, and subject. Every letter sent out is duly copied in the letter book. In his office are kept the archives of the nation, and by him are drawn all warrants on the public treasury. The present incumbent, Dennis W. Bushyhead, is a portly, handsome man, well educated, a man of the strictest integrity, and of excellent executive ability, educated partly at Princeton, New Jersey, but far more by vigorous contact for over twenty years with the elements from all parts of the world thrown together on the gold fields of California, in 1849. He is an *American* who indicates but little either the Indian or the nationality of his white blood. His white ancestry might have been English or German. He has been claimed by one of the sons of the Emerald Isle to be an "Irishman," who, on seeing him and hearing his name "Dennis Bushyhead," exclaimed, "Dennis! Just look at the Irish now! how they are taking the whole warruld! Look at the Chafe of the Cherokees! Dennis!"

The Cherokees have a Treasurer under a \$75,000 bond, but whose strongest bond is his honor, the ties with the people by blood and the associations of a life, and by the residence there of all his blood kin. If the bond were all, he might be tempted to decamp, as he has sometimes hundreds of thousands of dollars in his hands — the present Treasurer having now in his hands \$370,000. He is the custodian and disburser of the funds on lawful warrants and appropriations.

The Executive Department has also an Auditor who supervises the accounts of the nation, etc. Each of the political districts — nine in number — has its sheriff, deputy sheriffs, guards, clerk, deputy clerks, who are required to keep complete record of the various courts meeting in their several districts, all probate matters, transfers of property, register cattle brands owned by the citizens, and all business requiring public record. Each district has also its prosecuting attorney, whose duty it is to conduct all examinations of crimes committed, or persons charged, and prosecute all persons indicted in pursuance of authority given him by law, and he takes an oath to that effect to do his duty within his district without fear or favor, partiality or malice, and to be faithful to the Cherokee Nation in all prosecutions, to the best of his skill and ability.

The Chief has an Executive Council composed of three members selected by the National Council from among the leading men of the nation, to advise and counsel with him as to the management of

public affairs. The Chief, in order to prevent, as far as possible, errors on the part of his officers, has many printed forms which he furnishes to them with printed instructions as to their several duties. This may be regarded as the best school in the limits of the Cherokee Nation. If there were time, I should like to present for your information some of these forms. If any of these officers fail or refuse to do their duty, the Chief is authorized to suspend them until the next meeting of the National Council, to whom he is required to report his action, together with the defence of the accused party.

The Legislative Body of the Cherokee Nation is composed of a Senate and House of Representatives commonly called the Council, and who are controlled by the ordinary Parliamentary rules that govern such bodies, although they are not carried out with the same degree of refinement found in a state legislature. Both languages are freely spoken in the Senate and Council and they have interpreters who interpret for those who may not otherwise understand; but it will not be many years before the English language alone will be used, many of the Representatives already speaking both languages, and nearly all of them understanding English. Their complexion, however, is rather swarthy as a whole, the majority—probably three-fourths of the members—being full-blood Indians, there being but one white man, an adopted citizen, in the present Council. They are elected by the people, every man over eighteen having a vote and voting *viva voce*. They have two clerks and two judges at each election precinct,—one judge and one clerk from each of the rival parties,—and they record the voter's choice in his presence. Their ballot-boxes cannot be stuffed, but a wonderful amount of eloquence is expended at times to throw out a troublesome precinct from being counted in the National Council, on some legal quibble, where the election law is alleged to have been violated in some particular.

The Cherokees are the greatest politicians on the face of the earth, without possible exception. Their elections have been described as a tempest in a tea-pot. Each party has a thorough and complete organization, each with its platform; each with its three head managers for the Nation, three District managers for the District, who are its manipulators. Each party gives barbecues, has speakers to talk for them, and they villify the opposing party with as much vigor as could possibly be desired or hoped for in the most enlightened community. They resort to all the schemes known to

mortal man to secure votes for their respective parties. They get the voter's bearing from every point of the compass, they know his church, his neighbors, they know "his sisters, his cousins, and his aunts," they know his old party affiliations, they measure up his personal pride, his present and his future ambition, his necessity and the necessities of his friends, they find who has influence with him and they bring all these influences to bear. And all of these things are educating the Cherokee people. They are being fooled, trifled with, told the truth, honestly dealt with; and out of it all they are getting sense, they are beginning to think, they are thinking, and the time has passed — as Bushyhead has declared in one of his public addresses — when one man or one set of men can control the Cherokee people. They now look to the record and demand the record, and as a people they are quite thoroughly posted in the affairs of their nation.

The Judicial Department of the Cherokee Nation is composed of a district court for each of the nine political districts with probate jurisdiction and original and exclusive jurisdiction over certain minor civil cases and criminal offences, with certain rights of appeal to the Circuit Court, which meets twice a year in each district. The Circuit Court has original jurisdiction over civil cases exceeding \$100 in value, and in felony cases. The right of appeal lies from the Circuit Court to the Supreme Court of the Cherokee Nation. In cases involving the death penalty, a member of the Supreme Bench presides. These Courts issue writs of attachment, of garnishment, writs of injunction and mandamus. They have a complete jury system and grand jury system, and their code is very well adapted to afford remedy for any injury sustained in life, person, or property. Indictments conclude, "Against the peace and dignity of the Cherokee Nation."

In Section 11, Art. 3 of the Constitution, we find the following, to wit:—"In all criminal prosecutions the accused shall have the right of being heard; of demanding the nature of the accusation; of meeting the witnesses face to face; of having compulsory process for obtaining witnesses in his or their favor and on prosecutions by indictment or information, a speedy public trial, by an impartial jury of the vicinage; nor shall the accused be compelled to give testimony against himself.

"Section 12. The people shall be secure in their persons, houses, papers, and possessions, from unreasonable seizures and searches, and

no warrant to search any place or to seize any person or things, shall issue, without describing them as nearly as may be, nor without good causes supported by oath or affirmation.

"Section 13. All persons shall be bailable by sufficient securities unless for capital offences, where the proof is evident, or the presumption great."

The Indian citizen presents the peculiar feature that he will not abandon his country even if he escapes. I do not recall a case where a convict, even under sentence of death, escaping (and there has been a number), did not loiter about the country till he was recaptured. The Cherokees are very merciful in the use of the pardoning power. With the Choctaws it has actually been the custom to give the convicted murderer freedom to go home and wind up his affairs, with the understanding he shall return on the day of execution and be shot. It would have been a deep disgrace to the convict and his family not to return. This has changed under the injection of Saxon blood. Many now think that to be a live coward is preferable to being a dead hero.

The various departments of the Government are supported and indeed all of the expenses of the Cherokees are paid out of funds derived from the sale of lands sold to and the proceeds invested with the United States Government, in registered bonds, and from the revenue derived from the law in the way of licenses, permits, etc.

The Public Buildings of the Cherokee Nation are all that is required to meet the wants of their Government.

First, the *National Capitol*, at Tahlequah, is located on a small stream, fed by a number of large springs, which runs over a gravelly bed down through the hills into the Illinois River a few miles away. It stands within a square surrounded by oak trees, in a yard of blue grass, with entrances on the north, east, south and west. The building is of brick, stone-capped; two stories high; cupola; shape-ly and convenient. It contains the Executive office, Executive consultation room, Supreme Court room, Supreme Court consultation room, Auditor's office, Office of the Board of Education, Senate Chamber, Council Chamber, Treasurer's office, and three committee and consultation rooms.

The printing office of the Cherokee Nation in which is printed their laws in both languages, and the *Cherokee Advocate*, the national organ of the Cherokee Nation; and any blank forms required by the Executive Dept. in the transaction of public business for the in-

struction and guidance of his subordinates, etc. The *Advocate* is printed in both languages, and nearly all the Cherokees read Cherokee, which, being purely phonetic in its spelling, is learned as soon as the symbols are learned; and there are but eighty-four syllabic symbols. This paper is intended to keep the people well posted on all matters pertaining to the Cherokee Nation. It is non-partisan and the official organ of the Cherokee Nation. The building is of stone, two stories high, supplied with a cylinder press and thoroughly equipped with material and having an Indian "devil"—the only one in the Cherokee Nation.

The National Prison stands one block south of the printing office, at the capital; a building two stories above and one beneath the level of the ground, in which are incarcerated some twenty-five prisoners called convicts, who wear the regulation zebra suit, and who labor on the streets of Tahlequah. They cut wood for the male and female seminaries, which are just south of the town, and for the blind asylum. The last named institution is several miles south of Tahlequah, on a beautiful knoll. It is of brick, four stories high, well constructed, has suitable out-houses, a farm attached, work and stock cattle, swine, a fine spring of water. In this institution the blind, the crippled, and the insane are cared for.

In each of the nine districts there is a commodious court house of frame, two stories high, with a large court room and grand jury room, a jury room, a clerk's office and sheriff's office, which amply provides for the needs of the district.

Besides these buildings there are two large, well-furnished Institutions called the Male Seminary and the Female Seminary of the Cherokee Nation. Each cost exceeding \$100,000 and on identical plans. The length of each is 185 feet by 109 feet in width. The older parts are three stories high and the newer part is four stories high including the spacious basement which rises a half story above the level of the earth. The basement is used for laundry, storage rooms, furnace rooms, and other purposes; upon the second floor are the recitation rooms, the chapel or study hall, library, laboratory, textbook room, dining hall, kitchen, family room of steward, parlor, rooms for visitors, storerooms and closets. Upon the third and fourth floors are rooms for teachers, matrons, students, bath-rooms, and storage rooms. They are large enough to accommodate properly 150 boarders each, although the enrollment for the Male Seminary was 180 during the session just closed, and there were as many as 160 present at one time, the average attendance being 140.

They are furnished with suitable out houses and are supplied with furniture, school material, and everything necessary to institutions of this kind, having excellent Faculties of seven teachers and instructors, six other officers,—steward, superintendent of the domestic department, two matrons, medical superintendent, librarian. They have a greenhouse in which a number of very pretty flowers are kept during the winter. The Orphan Asylum is of brick, capped with stone, beautifully situated in a valley on Grand River, forty miles north of Tahlequah near the Grand Saline Springs. It is a mixed school and averages about 150 children. Besides these buildings there are 100 common schools scattered throughout the districts, in proportion to population; the neighborhoods furnishing the houses, which vary from a first class frame building, thoroughly equipped with modern desks and heating facilities, ventilation, light, etc., to the rude log cabin with an open fireplace, and which in winter does not afford proper protection against the cold. This class of houses have no desks, some of them have puncheon seats and such furniture as was probably used in most of country schools some forty years ago.

The school system of the Cherokee Nation is founded on the Constitution of Sept. 6th, 1839, Art. 6, Sec. 9. "Whereas, morality and knowledge being necessary to good government, the preservation of liberty, and the happiness of mankind, schools and the means of education shall be forever encouraged in this nation."

The school system of the Cherokee Nation is complete. It is controlled by the Board of Education whose power and duty it is to adopt rules and regulations not inconsistent with the laws of the Cherokee Nation for its own government and the government of the seminaries, orphan asylum, and primary schools; to prescribe and enforce rules for the examination of teachers and for the admission of pupils to the seminaries, rules for the course of study in the seminaries, orphan asylum, and primary schools; to prescribe and enforce a series of textbooks uniform in all the schools; to grant or revoke for improper or intemperate conduct, certificates of all grades, etc.

The school teachers are appointed upon competitive examination. About seventy-five per cent. of them are citizens of the Cherokee Nation. The school term is nine months, except the orphan asylum which is ten months. The teachers in the seminaries and orphan asylum are well paid and are furnished everything. The teachers in the common schools are paid thirty-five dollars per month for the average attendance of fifteen or less, and one dollar per month extra for each

pupil, until an average of thirty-five is reached, which pays the common school teacher fifty dollars per month. It is not thought wise for one teacher to teach more than this number. The best teachers are placed where the probable average is greatest and they are thus stimulated to an increased average attendance. The textbooks in use are the Eclectic Series throughout, published by Van Antwerp, Bragg, & Co., Cincinnati. The teachers are required to make monthly reports to the Board of Education, giving the name of each pupil, the number of days he was present, his standing, showing on the face of the report the aggregate attendance and average attendance, and at the close of the term to furnish a term report giving the term aggregate and the term average on which the teacher is paid. Blank forms are furnished by the Board of Education, complete, with instructions as to the manner of making out these reports, so that the Board of Education has a complete record of the entire system with the name of every child, the age, sex, language, attendance, distance from school, etc. The Cherokee Nation furnishes all the school books and school material necessary to run the public schools, furnishing blackboards, crayons, slates, pencils, ink, penholders, copybooks, as well as ordinary textbooks. Each teacher is held personally responsible for this property, and each schoolhouse is required to be equipped with a bookcase and lock with which to protect this property.

The male and female seminaries are, in brief words, first-class academies with a thoroughly able course of study, and as well equipped as similar institutions in the States. At both institutions they teach music; at the female seminary are three pianos, an organ, etc. In these seminaries the only unusual feature is the beneficiary department, in which at each institution are fifty pupils who are furnished clothing, tuition, board, and lodging gratuitously by the Cherokee Nation,—the others paying the nominal fee for board, lodging, tuition, washing, etc., of five dollars per month.

At the Orphan Asylum all the orphan children of the Cherokee Nation are provided for, being furnished everything and cared for from one year's end to another. The school is of a little lower grade than the male and female seminaries, but higher than the common schools. An effort is made here to teach the children manual labor, but not very successfully. This institution has a kindergarten for the smaller children which has been very successful.

CHEROKEE NEGRO EDUCATION.

In the Cherokee Nation there are about 5000 children. The aggregate school attendance is over 4000 or 80 per cent. of the entire number. The average attendance is 2600, or 65 per cent. of the enrollment,—a showing that is respectable when compared with states of a much older civilization.

The English language alone is permitted to be taught in the schools of the Cherokee Nation, and there is an earnest desire shown to teach the people the English language and to have their children instructed in it. The full-bloods have before their sight a constant object lesson of a half breed surrounded by the comforts and elegancies which his superior intelligence has enabled him to obtain. He is blood kin to the full-blood to whom the same road is open and the full-blood understands this and appreciates it, and although he himself is unable to accomplish as much on that path, he wants his children to do so.

The religious instruction of the five nations has not been neglected. The Methodist Episcopal Church South has 59 ministers with regular circuits and probably 100 native ministers who preach when occasion offers. They have enrolled 8,213 members, have 64 churches and 94 Sunday-schools, and are educating 499 children in secular matters at the same time in a half dozen first class schools.

The Baptist church has probably 75 regular ministers and 175 native ministers and probably 13,000 members. It sustains several excellent schools.

The Presbyterian church has probably 35 regular ministers and 15 licentiates, about 1200 members, and a number of superior schools.

The Moravian, the Congregationalist, and Roman Catholic churches are represented on a smaller scale.

There are probably 200 regular ministers of the Gospel, 300 native ministers, and 24,000 members of the churches mentioned. There are probably 350 teachers in the five nations regularly at work.

The Creeks and Seminoles have been much assisted and have needed and appreciated it, for they had not the means of the other nations.

LAND TENURE.

The most striking feature in the government of the Indian nations, when contrasted with that of their white neighbors, is that the title to their entire domain is in the nation as a practically unqualified fee. The individual has the right to use and to occupy, to sell or devise to

other citizens this right of use or occupancy, and in case he dies intestate it descends according to statute law to his wife and children or nearest relatives. He has the right to use all he can enclose and cultivate and no other citizen can come within a quarter of a mile of his improvement,—thus ensuring to every Cherokee who is willing to work, a certain home and certain remuneration for his labor, and they have availed themselves of this in proportion to their intelligence, ambition, and several abilities. There is a provision in the constitution against unseemly speculation or monopoly of improvements on the public domain, and while this tenure may seem strange to those who have not seen its qualities tested, it might well be argued as superior to the title in the individual commonly obtained under American law. This system precludes a possibility of unjust pauperism sometimes imposed on worthy labor by force of modern circumstances or ancient circumstances surviving in modern times. However this question may be argued by political economists there is no doubt in my mind that this is the true safeguard for the Indian people until they shall have grown, under the educational influences now working, up to the capacity of full American citizenship,—until he is equal to dealing with the white man and able to cope with the wiles of the ordinary land swindler. This will necessarily require some time, for if there is one villain on earth more skillful than another in wicked ingenuity it is that class of manipulators who swindle the Indian out of his lands whenever they have been patented to him in individual fee.

The requirements which the Government has thrown around such titles for Indian protection, seem to have but added dignity to the title of the swindler, hedging it around with bogus affidavits, untruthful and fraudulent certificates, which on their face appear so irreproachable that suspicion itself dare not asperse its high character.

Having the right to use and occupy the land, the Cherokees are using a great deal of white labor, giving employment to thousands of farmers, whom they require to produce certificates of good character before taking up their residence in the Cherokee Nation. This produces a healthy intercourse, adds to the material wealth of the country, stimulates and encourages other Cherokees to the same course.

The one thing for which the Cherokees ask and pray, is that the Government of the United States will keep faith with them,—keep its solemn promises, and not allow a horde of misguided citizens, led by a few clamorous robbers, to break down the solemn guarantee of the

Government and rob them. The American people are honest and true at heart and are willing and eager to see justice done when once it understands, but if not watched and prevented by the friends of humanity and lovers of justice, organized rapacity would soon overwhelm these comparatively feeble communities. To the American people they appeal to see that the guarantees given to them in treaty after treaty, in pledges unnumbered and made as solemn and sacred as human language and circumstances can render them, be not violated or dishonored.

I cannot believe that they will be, but the Cherokees have kept a standing lobby in Washington ever since the war, at an expense of at least \$10,000 a year in apprehension of this very thing, and for the purpose of preventing it. Their petitions and memorials, urging the maintenance of the treaty guarantees, would make volumes of printed supplications; and they have had ample ground to fear such violation, a thing which might occur, as they well understand, in the rush of business in the American Congress, without the intention on the part of many who might support such measures, to do the least dishonesty.

A great many Americans loosely but seriously entertain the opinion that the American Indian, who has bought and paid for 500 acres of land, has a right to have 160 acres of his own land and have the 340 remaining sold for his benefit at \$1.25 per acre, although it may be worth much more in actual fact, and the Indian quite capable of negotiating the trade at these figures. If it is the desire and wish of the friend of the Indian to serve the five nations, let them see that these treaty guarantees are observed; let them give the youth a little time in which to attain his majority, and do not, in impulsive haste to have him six good feet high, lay violent hands on the lad and pull him by main force to the desired length.

The wild tribes should be educated as an entirety so as to control in the education of the majority the sentiments and the opinion of the tribes, and they should be taught to support themselves. This can only be done by liberal appropriations which will not be passed till the American people ask it.

The chiefest virtue philanthropists need to show in dealing with the Indian is patience. A man with inherited qualities cannot at once overcome them. Let Congress increase tenfold the present appropriations for the education of the wild men, who unlike the civilized tribes have not the means to educate their children, and out of these people will grow in a few years a class of intelligent and useful

citizens, as many already have become. They will then be absorbed into the great body of American citizenship, where all the races of men can and do meet on the level of common right and eternal justice.

II.—THE EDUCATION OF THE MONGOLIAN, OR CHINESE.

BY REV. S. L. BALDWIN,—LATE MISSIONARY IN CHINA.

It is well that this great National Association gives a portion of its time to the consideration of the problem of Race Education in the United States ; and, inasmuch as the Chinese are with us in considerable numbers (at one time somewhat over 100,000—now about 80,000), it is proper that the question of the education of that race in America should have a share in your discussions.

If the question be asked, Are the Chinese good subjects for education? there is no difficulty in arriving at a clear and satisfactory answer. We need only to look at the question *historically*, to be assured that they are a people every way worthy of education ; for their history shows that physically, mentally, and morally, they are worthy of a high rank among the nations of the earth.

Their physical capability and power of endurance is abundantly shown in the construction of the Great Wall, which separates Tartary from the Eighteen Provinces, running in a general line from east to west, a distance of fifteen hundred miles ; in the Imperial Canal, six hundred miles in length ; in the speedy and successful completion of the Central Pacific Railroad in this country ; and in many other works, which might be cited as monuments of patient industry and great physical endurance—showing also, in his own country, the Chinaman's skill, his mechanical ability, and his knowledge of engineering.

His *intellectual powers* are demonstrated by the Chinese Classics, and by the voluminous works on history, philosophy, and belles lettres, which require two hundred catalogues, in themselves volumes of considerable size, simply to enumerate them. Between the years 220 B. C. and 600 A. D., five successive conflagrations destroyed the Imperial Library, and in each instance the volumes were reproduced by copies made from those in possession of the scholars of the Empire. Such extraordinary efforts to restore and preserve this great library show not only great mental activity and energy, but intense and insatiable love of literature and learning. This Imperial Library has over 300,000 volumes ; and there is a sort of cyclopædic digest of it,

in the preparation of which 2,169 clerks and copyists were employed, and which contains 22,937 books in about half that number of volumes.

We must not forget, in this connection, that the Chinese are a people who, for thousands of years, have made education the test of fitness for civil office, who have sought to secure men of ability for the service of the Government by competitive examination; and who expect of the officers thus secured, that they will instruct as well as govern the people. And, in fact, nine-tenths of all the new books that are issued, are written by these men, whose after-dinner speeches, instead of chatty small talk, consist of impromptu poems. These officers of the Empire do not come to their position by descent, like the members of the House of Lords, nor by the working of party machinery which so frequently carries men into the House of Representatives, but earn the places they hold by superiority in intellectual contests. No country in the world is so democratic in its method of filling its offices as this ancient monarchy, into whose arenas for promotion every man may enter, except certain classes which are prohibited for reason. It is a wonderfully interesting sight to behold 10,000 students entering the Examination Halls. Here are sons of the wealthiest and proudest families of the province, and side by side with them sons of the poorest peasants, and even of the beggars upon the street. I was accustomed to pass, in one of my country trips in the Fookieu province, a mandarin grave, with its granite pillars, indicating official rank, which was the last resting place of a beggar. His son, by success in the competitive examinations, had become a mandarin, and in accordance with Chinese ideas of propriety, posthumous honors had been bestowed upon the father, who thus, although a beggar while living, reposed in a mandarin's tomb after death. Into these examinations, the old man of sixty or seventy, who has been entering the lists every year for forty or fifty years, and the lad of sixteen or eighteen enter, side by side. The mandarin's son has no better chance than the beggar's; age has no advantage over youth. The only question to be answered here is, Who stands highest in his studies?

Most justly does the Rev. Dr. W. A. P. Martin, say, in his work on "The Chinese — their Education, Philosophy, and Letters":

"Here at least is one country where wealth is not allowed to raise its possessor to the seat of power; where the will even of an Emperor cannot bestow its offices on uneducated favorites; and where the caprice of the multitude is not permitted to confer the honors of the State on incompetent demagogues."

Let us bear in mind, too, that this system is not a thing of recent origin. Over 4,000 years ago, the great Emperor Shun examined his officers every third year, and either promoted or dismissed them, as the result. A thousand years before the Christian era, candidates as well as officers were examined, and were obliged to show their acquaintance with the "Six Arts," — music, archery, horsemanship, writing, arithmetic, and the rites and ceremonies of public and social life. About the time of the Christian era, the District Magistrates were enjoined to send up to the capital men who had acquired a reputation for filial piety and integrity; and besides the "six arts," the examinations were extended to include civil law, military affairs, agriculture, the administration of the revenue, and the geography of the Empire, especially in regard to the state of the water communications. A thousand years later, further advancements were made, and the graduates were arranged in three classes, and the officials in nine, a system which remains to this day.

The examinations commence with candidates for the grade of *Sin-tsai* — the Chinese A. B. — in the district capitals, which are about equivalent to our county towns. Here about 2,000 students enter, under the presidency of the Literary Chancellor, who is appointed by the Emperor, for the Province. Shut up for a night and a day, each in his narrow cell, they must each produce one poem and two essays on themes assigned by the Chancellor, to test their knowledge of the Classics. The examination by the Chancellor and his assistants of the themes thus produced has reference to penmanship, style, and matter. About 20 of the 2,000 receive the degree. Once in three years these graduates from the districts go up to the Provincial Capital — answering to the state capital with us — to compete for the second degree — *Chu-jin* — or A. M. In the large provinces, there are about 10,000 competitors, under special examiners sent from Peking. They are shut in as before — only that there are three sessions of two and one-half days each; and at each of these sessions poems and essays must be written on themes assigned at the time. There is no going to libraries to "cram," no opportunity to consult a "chum" who has more brains, or has made better use of such as he has. In this examination, no regard is shown for penmanship; only the extent and accuracy of scholarship are taken into account. Every essay is copied by a scribe, so that no possible clew as to the author can be obtained from the handwriting. Possibly 300 of the 10,000 students may obtain the degree. They are then "Promoted Scholars," but not yet officers.

In the spring of the following year, they go to Peking to compete with the other Chu-jin from all parts of the Empire, for the third degree — the Chinese LL.D. If successful in this final contest, the candidate receives an official appointment; it may be as Mayor of some District City, or Judge of some Circuit, or some position in connection with the Hanlin College — the “Forest of Pencils” — the members of which stand at the head of the literary profession, are the Imperial poets and historians, and are sent to be Chancellors and Examiners in the Provinces. Once in three years, the Emperor designates the most successful contestant among these Doctors of Laws as the Chwang-yuen — the first scholar of the Empire. Messengers are sent to bear the tidings of his victory to his home, and in some far remote town they enter perhaps one of the humblest dwellings, whose inmates are startled by the noise of trumpets, and the appearance of imperial banners, announcing that a son of that household has become the Chief Scholar of the Empire.

The “Book of Rites,” written about 1200 B. C., states that “for the purposes of education among the ancients, villages had their schools, districts their academies; departments their colleges, and principalities their universities.” Bear in mind that this was written 3000 years ago, and was speaking of what the ancients had, long before that time.

The chief book for juvenile instruction — the Siao Hioh — says that the way to become a student “is, with gentleness and self-abasement to receive implicitly every word the master utters. The pupil, when he sees virtuous people, must follow them, when he hears good maxims, conform to them. He must cherish no wicked designs, but always act uprightly; whether at home or abroad, he must have a fixed residence, and associate with the benevolent, carefully regulating his personal deportment, and controlling the feelings of his heart. He must keep his clothes in order. Every morning he must learn something new, and rehearse the same every evening.”

The education of children is encouraged in a little book entitled “Odes for Children,” of which the following stanzas will serve as a specimen :

“ It is of the utmost importance to educate children;
Do not say that your families are poor,
For those who can handle well the pencil,
Go where they will, need never ask for favors.

“ A passage for the sea has been cut through the mountains,
And stones have been melted to repair the heavens;
In all the world, there is nothing that is impossible;
It is the heart of man alone that is wanting in resolution.”

Surely a people whose whole history is so full of regard for education, and who have shown so much capacity for it, have a valid claim upon our attention, and a right to our hearty respect, while we consider the problems of race education in this country.

The experience of missionaries and others who have carried on educational work in China during the last forty years abundantly proves the mental capacity of the common people. The Rev. W. Ashmore, D. D., of the American Baptist Mission at Swatow, says :

"We took common people grown up to manhood, and heads of families with but little intellectual training beforehand, and instructed them so that they could repeat the contents of a whole epistle. A man, fifty years old, mastered the whole epistle of Romans, and recited it without a book in hand, and with only an occasional prompting. I had at one time a class of five preachers, whom I had occasion to train thoroughly in the Pentateuch. They studied it at their stations while doing their mission work, and when they came in, once in two months, they would go over the appointed lesson, half a book at a time, with reviews. The new men were a year about it; but on their final examinations, on my naming any given chapter, as "What is in the 20th chapter of Exodus?" they would tell me immediately. Three of the class could tell the contents of any chapter in the whole Pentateuch immediately on its number being given. One of these men was over fifty years of age, another over forty, and none of them under thirty. I have found the Chinese accurate reasoners from data given, and unusually careful in examining their data before they begin to reason."

My own experience and observation have abundantly demonstrated to me the mental power of the Chinese. In our day schools in the province of Fookien, we frequently had boys and girls of ten or twelve years of age who could repeat the whole gospel of Matthew. In our boarding schools, the progress of many of the students in arithmetic and astronomy was most encouraging. They showed their ability to comprehend the principles of a science, and to make correct applications of those principles, aside from their books — manifesting that their study was not mere memory work, although as memorizers they surpass all other people. I was often called upon at Foochow by one of the mandarins who had an insatiable thirst for knowledge, and at once purchased every new book which was translated into Chinese. He was greatly delighted with Herschell's Astronomy, and studied with great satisfaction Differential and Integral Calculus.

The readiness with which the students in the Imperial College at

Peking, under the presidency of the Rev. Dr. Martin, and those in the Arsenal Schools at Tientsin, Shanghai, and Foochow, have taken hold of western sciences, and the rapid progress they have made in various departments of western knowledge, present unanswerable evidence both of their ability to master the curriculum of our schools, and of their appreciation of the advantages of western learning.

Thus far I have spoken only of the education of the Chinese in their own country ; but we are not without some very valuable data to show that what we would reasonably expect from these facts can be realized in their education in America. Mr. Yung Wing, after receiving some preliminary education in the Morrison School at Hongkong, came to this country, and studied at Yale College, where he graduated with honor in 1854, taking the first prize for *English Composition* over the heads of bright young Americans who were his competitors. His Alma Mater worthily bestowed upon him the degree of LL.D. in 1876. It was at his instance that the Chinese government sent 120 young men to this country for education, and he was for a considerable time in charge of that work. He has also been a member of the Chinese Legation at Washington, and has acquitted himself most honorably in every position he has held.

Mr. Chan Laisun, starting from very humble life, came to this country with a missionary, studied in a school at Bloomfield, New Jersey, and afterward at Hamilton College, and rose to positions of great influence. He was connected with the Educational Commission in this country, and since his return to China has been engaged in important service for the government.

Between the years 1872 and 1876, the Chinese Government sent 120 students to this country for education. Owing to the accession to power of an anti-foreign ministry, and to the suspicion entertained by them that the students were becoming Americanized in their ideas and habits, they were recalled in 1881, thus bringing the experiment to a premature end ; but they were here long enough to show how highly Chinese youth can appreciate Western education, what rapid progress they can make in it, and how much higher a stand they can take in the departments to which they are assigned—such as engineering, translation, and the Naval Department—than students who have not had the advantage of Western education. These young men are the most reliable and useful in the service of the Government to-day. In addition to the direct advantages of education, the influence upon their characters of the Christian homes of New England in which they

had their abodes was most healthful; while, on the other hand, they won a very warm place in the regard of the families in which they lived, by their gentle, quiet, and courteous demeanor, and their grateful appreciation of all kindness shown them.

The Rev. Otis Gibson, D. D., for ten years a faithful missionary in China, and later a most earnest and successful worker among the Chinese in California, organized an extensive system of Sunday Schools and Evening Schools in that State. Beginning with the Sunday School work in 1868, and establishing Evening Schools a little later, in 1876 he reported concerning the latter:

"The first year the average attendance was 25; last year, 80. The schools are opened in the evening, because most of the Chinese are employed during the day, and the evening is the only time they can spare to attend school. The scholars are of all ages from eight to thirty-five years, and of all grades of intellect, from exceedingly stupid to exceedingly keen and intelligent. I have known a few of these scholars by faithful, constant study in these evening schools for three or four years to become quite as intelligent as thousands of white boys of the same age with far better advantages. The scholars of this Mission School now occupy four pleasant schoolrooms, employing five teachers. The teachers receive \$25 a month salary. The scholars are graded as far as possible into classes, and uniform class-books are used. Of course, the primary classes are always the largest. The book used in the primary classes is an illustrated lesson book, entitled 'Jacobs's Reader,' prepared expressly for the deaf and dumb. The more advanced classes study arithmetic, geography, grammar, and history. . . . The nominal sum of one dollar a month is charged, but it is left optional with the pupil whether to pay it or not. The first year about \$230 were received in this way; the last year, \$446."

I remember with great pleasure an evening I once spent in one of these schools. The young men were generally bright and quick-witted. One class was being examined in regard to different sorts of animals. "What is an elephant?" was asked. "A quadruped," was the answer. "What is a chicken?" "A biped?" "A horse?" "A quadruped?" "What is an oyster?" The bright boy to whom the question was put responded at once, "No ped at all!"

As to the mathematical ability of the Chinese, Mr. Cornelius B. S. Gibbs, an adjuster of marine losses at San Francisco, testified before the Congressional Committee: "I think they are the best mathematicians I ever saw in my life. . . . In fact they are the only persons

who will go through an adjustment and seem to understand it. I never met a Chinaman who, if you gave him any figures to calculate, could not calculate them."

Only a few days ago I saw a Chinaman deeply engaged over a book, which I found to be an algebra. He was intent on the solution of some of its most difficult problems. A little conversation revealed the fact that he came to this country as an ordinary sailor, and had received only a little rudimentary instruction; yet he was wrestling successfully with problems which I found by no means easy of solution.

But enough has been said, certainly, to show that mentally the Chinese are worthy of education. I will add only a few words to justify my statement that *morally* they are a people worthy of our best efforts. It is only necessary to remind you that they hold in deepest reverence a Sage who, six hundred years before the Christian era, said to his disciples, "Never do to other men what you would not wish them to do to you"; and whose ethical teachings are not excelled outside of the words of Him who "spake as never man spake." Among their proverbs are such as these: "Men who never violate their consciences are not afraid of a knock at their door at midnight"; "Of all important things, the first is not to cheat the conscience"; "Do not consider any vice trivial, and so practice it; do not consider any virtue trivial, and so neglect it." The noble reply of one of the most recent of China's Emperors, when asked to legalize the opium traffic, is worthy of being written in letters of gold: "I will never consent to derive a revenue from the vices of my people!" The testimony before the Congressional Committee as to the integrity and honesty of the Chinese merchants in San Francisco was most remarkable. Frederick W. Macondray said, "I do not know any class of merchants who are more honest and upright, or who have a better reputation for integrity than the Chinese." Joseph A. Coolidge, the Secretary and Manager of the Merchants' Exchange, said of the Chinese merchants connected with the Exchange, that they are "honorable in their business transactions, and compare favorably with people of any other nationality. I have been informed by merchants who have had extensive business transactions with them, that the usual contracts in writing were unnecessary, their word being a sufficient guarantee of their fulfillment; and in a term of years, in which business to the extent of millions of dollars was transacted, not one cent has been lost by bad faith on their part." And there was much other testimony of the same purport.

I hold then that, physically, mentally, and morally, we have in the Chinese a people worthy of the best efforts we can put forth for their education.

We have great reasons for encouragement in regard to the education of the Indian and the negro, but neither of these races can present such antecedents to stimulate our endeavors and arouse our brightest hopes as are presented by the Chinese. The Chinaman has passed the stage of experiment, both in his own land and in ours, and has proved his capacity for education. We know what sort of material we have in him, and what we may expect from him. We know that he has the qualities which would make him the best sort of citizen; that in peaceful industry, in fidelity, in integrity, he would have no superior. We know that strikes have no attraction for him; that he cannot be drawn into boycotting schemes, or into whiskey shops; and that he has no fellowship with dynamiters. We know that while he likes to live well when he can afford it, he prefers living within his income to going into debt. We know that he has a fondness for doing what he promises to do, although he doesn't care to be a ward politician, or aspire to rule our municipalities. He is just the right sort of man for us to educate.

Some objections are made to the education of the Chinese among us, which ought to receive our notice. It is said that *they are slaves*, and it is not worth while for us to try to educate a class of men in that condition. It is amazing that this utterly absurd and baseless charge is still reiterated in the presence of intelligent people. There are no male slaves in China; it is not possible therefore that any should immigrate to the United States. The whole immigration here comes from the British port of Hongkong; British officers board every vessel, and ask each individual passenger whether he is going of his own free will, and none are allowed to depart unless they declare that they go voluntarily. When they reach San Francisco, they go where they please and do as they please. If they don't like the places they enter upon, they leave them and seek others. No man in this assembly is more perfectly free in all his actions than the Chinese in this country. This was abundantly proved before the Congressional Committee, as stated by the Chairman, the late Senator Morton, who said: "The evidence established the fact that Chinese labor in California is as free as any other. They all come as free men, and are their own masters absolutely." This fact is shown conclusively by our late Minister to China, the Hon. George F. Seward, who resided for several years in San

Francisco after his return from China, in his able and exhaustive work on Chinese Immigration, published by the Scribners; and in the able work of Rev. Otis Gibson, D. D., on "The Chinese in America," published by Crauston & Stowe, Cincinnati.

The charge that they are under the control of the Six Companies is of a similarly baseless character. It has been repeatedly shown that these companies are of the nature of mutual aid associations, in which membership is entirely voluntary, and which have no more control over their members than the New York Mutual Life Insurance Company has over its members. Col. F. A. Bee, the Chinese Vice-Consul in San Francisco, has a standing offer before the public of \$1,000 for any person who will prove that the Six Companies have ever imported a single Chinaman into this country; and no one has ever appeared to claim the money.

It is charged that the Chinese are morally degraded. If this were so, it would not be a valid argument against their education; but it is not true of them as a class. While there are wicked men among them, they can compare favorably with most of our immigrants in general morality. They are not the people who fill either our jails or our poor-houses. Moral principles receive their ready assent, and their practices are not more divergent from those principles than are the practices of their neighbors of other nationalities.

Once more, it is urged against them that they do not intend to become citizens. In order to make this apparent, the people who prefer the charge have secured the passage of a law which forever prohibits them from being naturalized. To this objection, several answers are pertinent: 1st, they are worthy of education even if the charge is true. 2d, Education would be likely to make them desirous of being citizens; as in the case of Yung Wing and others who have become naturalized citizens. 3d, While they do not come here with the purpose of becoming citizens, it is very probable that, with proper treatment, in the course of time many of them would be naturalized.

There are other objections urged, but none of any valid character. Then let the gates of education be opened wide to these strangers in our midst. For the common classes among us, the rudimentary instruction of Sunday Schools and Evening Schools will be well adapted; but let us remember that these men are not, as some suppose, the outpourings of the slums of Chinese cities, but are very generally from the country peasantry—from the very class of people

out of whose ranks have risen some of the best and wisest officials of the Chinese Empire.

For those who wish to obtain higher education, let all our schools be freely open—our grammar and high schools; our colleges and universities. They will need no other. It is not desirable that they should have special schools by themselves. It will be better for us and for them that they enter our higher schools, and come in contact with the brightest intellects of our own young men, trained under the systems of Western education. In a fair field they will ask no favors. They will stand well among their fellow students, and carry off their fair share of the prizes. The education they receive here will qualify them to be leaders of thought at home. In the time which is surely coming, when China shall introduce the modern sciences into her curriculum, they will be found guiding that ancient Empire along the path of progress, and adding to what has been valuable and useful in her past the stores of Western knowledge. Her conservatism will help her to tread safely along a new pathway which might otherwise be fraught with peril; and her future historian will pay a debt of gratitude to those Western educators who in the closing years of the Nineteenth Century opened the way for the highest education of her people in all the arts and sciences of the West!

III.—EDUCATION OF THE MEXICAN.

BY W. H. ASHLEY, PRINCIPAL OF THE LAS VEGAS ACADEMY,
NEW MEXICO.

The civilization of New Mexico at the time of the building of the A. T. & S. F. R. R. through it was that of the sixteenth century. Immigration has begun to awaken this sleep of ages, but thus far, light has dawned on the great centres only, and the effect has been to make the surrounding darkness seem but the greater. If one only visits the few American and Americanized towns passed through by the railroads, he has no conception of the territory, its inhabitants, customs, intelligence, religion, or laws. New Mexico is still Spain in the United States,—a region where the Spanish language, civilization, customs, habits, and religion still prevail; where the debates of the legislature, and the pleadings of the court are in a foreign tongue; where an American is put on trial for life and property with a jury who are strangers to his language, customs, and laws, and in many cases too ignorant to render justice, and too prejudiced to err on the side of mercy; where the records are kept in a foreign language. It is a Spain, too, not alone in language, but also in the theocratic form of government; a Spain, in which until within a few years, the Feudal system has survived in all its glory. The system of peonage beggared that of our southern slavery in its grinding oppression, its ignorance, and its superstition, for it had a higher power to aid it, and hemmed in by lofty mountains and trackless deserts the civilization of the nineteenth century advanced to her doors but found no reception within her borders. Her everlasting hills towering in grandeur to the skies, covered with the pine and cedar, and hiding within their bosoms a wealth of precious metals surpassing that of the Indias; her beautiful valleys made fertile by the eternal springs, and her broad mesas covered with the rich gramma have supplied but a meagre subsistence to her inhabitants.

South Carolina has been an educational test for the nation, but New Mexico surpasses her in the percentage of illiteracy by twelve; i. e., including the Americans, forty-four per cent. of her population cannot read or write. Oh, dark blot on the fair face of enlightened freedom!

Over three hundred years ago (1581) the Romish Church established the first mission in New Mexico, and from that time has controlled the religious and educational institutions of the people. It is not my intention to cry down the spirit which led the priests and friars to risk their lives in their devotion to the church, in carrying the gospel among savages and an isolated portion of the Spanish race, but I do say, for good or ill, praise or blame, the present intellectual condition of the Mexican people rests with the Romish Church. That condition, in 1880, resulted in a reported illiteracy of sixty per cent. in persons over ten years of age. For nearly three centuries the parochial schools were the only ones in the territory, and the few educated Mexicans obtained the greater part of their education in the States.

The first order for establishing public schools was made April 27, 1822, but it included no provision for their support, and consequently could accomplish nothing. In 1856 an effort was made to provide a tax for the support of the schools, but the counties of Laos, Rio Arriba, Santa Ana, and Socono, comprising the greater part of the territory, overruled it by a vote of 4981 to 35. In 1872 the first public school law, with provisions for a meagre support, was enacted. The part of these funds which has been collected during these fourteen years, has been largely used as a political corrupting fund by the county officials, or the disbursing has been left to the church. During the past three years there have been a few exceptions where the Superintendents have been faithful to their trust. We cannot learn that in any of the public schools as late as 1880, any provision was made for the education of girls, or that they were expected to attend. Even now, in most places outside of the larger Americanized towns, no girls attend the public schools.

The school laws of the territory are exceedingly defective. There are no provisions for school buildings or any of the accessories. There are no specified qualifications required of the teachers. The Superintendent has no control over the directors, who are elected by the people without any thought as to their fitness, and a large majority of them, in signing the contract, make a mark for their names. These directors elect the teacher, rent the room, and regulate the books and other supplies.

The funds for the support of the schools are inadequate. The taxable property is small, compared with the number of children of school age, for the children of the poor are many. The school tax in most counties does not amount to sixty cents per annum for each child. In

the large towns the tax would support excellent schools could it be used in the precincts where raised, but by the per capita distribution throughout the county, it is so diminished that it is incapable of carrying on what we would term a common district school in the States, and for only a few months in the year. In some counties there is not a single schoolhouse built by public funds. Most of the few good buildings in the territory have been erected by private subscription. There is no system of school books, and as the mass of the people are too poor to buy, they must take what is given them, which are mainly prayers of the church and lives of the saints. The same for old and young.

There are few competent Mexican teachers ; often they are very illiterate. It is questionable if there are ten Mexican public school teacher in the territory who could pass an examination for a third grade certificate in the state of Kansas. Numbers, not alone of the directors, but also of the teachers, cannot write their own names.

Picture to yourselves a mud building, seven or eight feet high, mud walls, mud roof, mud floor, twenty boys of varying ages entering the low door, carrying the wood which they have gathered on the way to keep them warm, as it burns in the mud fireplace. Pass in. Boxes, kegs, and adobes form the seats. No desks, no blackboards, no slates, nor pencils, no books save pamphlets of church prayers or saints' lives covered with calico by the fond parents for protection. Your typical teacher calls a class, to stand in a row before him, and as he reads, pronounce after him until they can repeat a certain amount without help, when they take their improvised seats to gaze at the wonderful hieroglyphics, while their teacher takes a stroll, smokes, and meditates. Such is the country school. (Personal knowledge.)

Under the above mentioned circumstances suppose the Blair bill had become a law and an appropriation made for New Mexico, of what benefit would it be to the people ? The territory is totally unfitted to use such moneys for the purposes intended and will be until there is a radical change. Such funds would be a premium for political chicanery, and fill the coffers of the church, while the people receive no material or intellectual benefit.

Turn to the legislative enactment of January 11, 1878. An act incorporating the Jesuit Fathers of New Mexico. This act contained general powers to establish educational institutions and the right to own an indefinite amount of property, all forever free from taxation. This bill was vetoed by the governor, passed over his veto, and annulled by Congress, February 4, 1879. The attempt was renewed at the

last session of the legislature, and only the national government stood in its way. We can imagine from this what would be the future of New Mexico should she at the present time become a state.

Can the Mexican be educated? This question was asked concerning the negro, and experience has answered it. Mental traits are transmitted as surely as physical ones. Geniuses may spring up among the most ignorant, but the process of lifting the masses will be a slow one. The highest intellectual development cannot be obtained in one generation where there have been centuries of mental neglect. Mediocre attainments are rapidly acquired by the Mexican, even where a new language must be mastered. Few brighter pupils can be found anywhere in the elementary branches. The New West schools have fully demonstrated this.

The problem then is as follows: Between forty-five and sixty per cent. of the Mexican population are illiterate, also their ancestors for centuries. The large majority are not pure Spaniards. They are wholly unversed in any language, but are able to transact business and be social in the Mexican. Their customs are foreign to the United States and are three centuries old. There is no school law that meets the need. No buildings, nor any way of getting them. There are no competent teachers among themselves. English speaking teachers they will not tolerate, unless they win their way through missionary supplies and a pure missionary spirit and devotion. No special tax can be levied for school purposes, and the funds allowed from the general tax and the poll tax amount to about sixty cents per annum, for each child of school age. The people are too poor to pay the tuition necessary for the support of private schools, and they must brave the wrath of their spiritual advisers if they take advantage of the mission schools.

The people are slaves to the church, and although there are several church colleges in the Territory, they are taught more prayers than mathematics, more history of the Romish Church than geography or science. Their textbooks are religious. The most important places are those which are the seats of archbishops. Those of secondary importance the seats of bishops. Wrong impressions of history are conveyed to the pupil by illustrations as well as by words.

Here is one of their United States histories, representing the landing of the Pilgrims, and planting a cross on Plymouth Rock under the direction of Romish priests. I know a boy who had attended a Jesuit College for eight years and when he made application to an

American school, was graded in the third year. This boy understood English and his future advancement plainly showed that the backwardness was no fault of his. Another received his first year's training from an American lady in a private school. He then attended the Jesuit College for five years, at the end of which time, he was obliged, on entering an American school, to begin where he was five years before. If their zeal for religious training did not overshadow that for education, it is still impossible for men educated in such countries as Italy and Spain to compete with the teachers of more advanced nations, or to adapt themselves to the improved methods of such nations.

The villages of New Mexico are small and widely separated. The people live where they can get water for their goats and sheep and for irrigation. This community of interests should be of great service in reaching the scattered population.

This problem is a difficult one to solve, but after six years of educational work in the Territory, I think the following suggestions, could they be carried out,—and they are neither impossible nor impracticable,—would throw a flood of light on the solution.

First, then: The schools should be divorced from the church and in no place made sectarian, and no clergyman should be allowed to serve on a school board. We do not mean by this that morality should not be taught, or that the Bible should be excluded from the public schools. God forbid! There is need enough, aye, far too much in this age of Christianity, for moral and spiritual training, and the first demand, yea, the most important, is that the instructor of youth be of pure morals, strict integrity, and if an earnest follower of the Great Teacher he embodies all moral qualities. But the schools in the past have not done credit to those who have controlled them, and it is time they passed into other hands. To remove their control from the Romish Church and give it to Protestants, especially while the mass of the people are Romanists, would not be right. Therefore, let them be free from all ecclesiastical control.

Second: The English language must be forced upon the people before they will adapt themselves to American customs. They will never learn the language so long as the national government treats New Mexico as a foreign province, and allows her laws to be made and records kept in the Spanish language, and court business to be carried on in the same tongue. Therefore, let Congress abrogate Spanish, abolish interpretation, and treat the Mexican as foreigners are treated in our Eastern courts. Make them understand United

States language and laws before they are permitted to be jurors. Their pride will then be an incentive for them to become American citizens in fact as well as in name.

In the third place, teachers must be provided for the schools. They cannot be gotten from among the Mexican people for there are but few fitted to perform the duties. You cannot supply them from the East. First: Because few competent teachers can be found, who, for the meagre pay and the uncertainty of the time for which the schools continue, would exclude themselves from society, or that could or would live in the Mexican families who would be willing to receive them. It takes time and sacrifice, and requires a mint of money to successfully fit teachers for adaptation to the manners and customs of foreign nations. *Chili con Carne* is not acceptable to all stomachs. Second: Under the present condition, few could be found qualified. So long as the Spanish language is retained, the teacher must be able to use it.

The people, with the exception of the better classes in the large centres, are unwilling that their children be taught in the English. They fear naturally for their children to learn in a language which they themselves cannot understand. The New West teachers who have had the greatest experience in the Mexican villages testify to the above statement. There is but one way to provide teachers. Fit the Mexican to teach the Mexican. Select the most promising of them and send them to a school that is capable of preparing them to teach their fellows. There are two things necessary in such schools. They must be in the territory and the tuition and board must be free. The first, because the parents will not give their consent for their children to be sent to a distance. The second, because of their poverty. Of course there are exceptions in both of these cases.

These training schools must be established either by the National government or by benevolent societies. If they are under the control of the territorial government, they will be under the control of the priesthood. They can control the elections in the territory, and can prevent to a great degree the attendance of the children. They say to the government, "The children cannot be gotten for the Protestant schools; give us the schools and we will fill them with children."

The great need of the schools established in the territory is opportunities for boarding and free scholarships. In the fourth place we need national aid. The poverty of many and the general lack

of taxable property are hindrances to an efficient self support of the schools. This aid should be controlled by commissioners appointed by the National government, who should have power to establish a public school system, hire the teachers, regulate the textbooks, provide buildings,—in fine, have absolute control of the school work.

Until this solution is reached the burden of education in New Mexico must rest on the benevolent societies of the East that have so nobly and generously assisted in the past.

IV.—EDUCATIONAL WORK AMONG THE COLORED RACE.

• BY PROF. W. H. BARTHOLOMEW, OF LOUISVILLE, KY.

Mr. Chairman :—

I wish to say in justification of myself that I received a request since I came here, to speak upon the education of the negro. Since my arrival I have been extremely busy in one department and engaged actively in the Council of the Association, so that I have not been able to put what I shall have to say in logical form. But my loss I think may result in your gain. Instead of having a long paper, wearing your patience, I shall say what I have to say as briefly as possible. There are some things which are settled so far as the negro is concerned, and one of those settled things is, that he is capable of receiving the highest order of education. We must remember, however, that when the war closed, and this large mass of illiteracy was thrown upon the southern states, that there was one virtue which was to be exercised in order that the education of the negro might be properly attended to ; and that one virtue was patience. I undertake to say, that so far as the education of the negro in the South is concerned, that we are compelled, from the very necessity of the case, to consider the social environments and the conditions under which we find him. We have acknowledged in the South, long ago, with those of the North, that intelligence and virtue constitute the indispensable condition upon which the liberty of this government is to be secured. But when it comes to the proper education of the negro in the South, we have a right to say that, so far as the details of that education are concerned, we have the right to consider the conditions which surround us and to choose the very best thing we can under the circumstances, in securing the proper education of the negro. This we have done. I am not prepared this morning to state to you so as to give you an enlarged conception of what is done in the South in reference to the negro. I am prepared, however, to communicate to you that, as far as I am able to gain information, the same thought, the same conception, the same idea in reference to the education of the negro seems to prevail among all of those who are leading thought in this direction, in the entire South. We started out upon this question and we made some failures. We had to handle the question delicately, because it was the centre of attraction just then. We had to be very careful what we did and how we did it, and hence, therefore, perhaps the extreme influences

had an undue weight upon us and what we did. But I wish to state to you now that everything has adjusted itself. There is no avenue to learning and to culture, to the development of character, in the State of Kentucky that is open to the white boy or girl, that is not as equally and as wide open to the colored boy or girl. I wish to say, also, to you that so far as purpose is concerned, so far as modern school buildings with all their modern appliances are concerned, so far as textbooks are concerned, so far as qualified teachers are concerned, whatever applies to the white boy or girl equally applies to the child of the negro. I wish to say more to you, and that is this. That in that State the per capita, or state tax, is equal for the colored and for the white. And I wish to say to you that so far as the State in which I live is concerned, they have organized a system of common schools, followed by a high school, followed by a training school for training teachers, in order that they may conscientiously and successfully perform their duties; and this has been organized for the colored race in the South. And I wish to say further to you that the salaries of the white and the salaries of the colored—those discharging equal responsibility—are exactly the same. Now I ask, in the name of reason, in the name of common sense, what more can you ask than these. They stand on an equality, they have equal advantages. The white taxpayer in the city of Louisville and throughout the state of Kentucky, puts his hand in his pocket and pays the taxes; and he thinks that when he thus invests his money in building up character in these boys and girls, that they may discharge with conscientious fidelity all that the Government and State may require at their hands, that he is investing in that which will pay him the largest possible per cent. More than this, the recent legislature which met in the city of Frankfort, through the joint committee on Education from the Senate to the House, considered this question of the education, or rather of the preparation of the colored teachers of the state of Kentucky; and they have established a State Normal School for their instruction. So that, therefore, there is provided in the State which I have the honor to represent, that deep and profound conviction that the well being of our society, that the purity of our politics, that the purity of our social relation, depends upon the education of the children of the State, regardless of race and color. Now I say this to you—Be careful how you accept statements that are given out in reference to the education of the colored people in the South. I will speak confidently in reference to Kentucky. We are a band of men and of women who, when we learn our duty, when we are convinced of what we ought to do, we have the courage, regardless of consequences, to step to the front and do that thing which we believe it is right to do.

Any system of education, any plan or scheme—and that is where we made our mistake in the beginning—which does not require activity, that

plan or scheme will fail to produce the highest result. The negro, in the beginning, thought all he had to do was to sit passively by and receive, without any activity on his part, that which had been so lavishly prepared for him. He had to be taught that he was under a responsibility; that there was something for him to do; that he was to be actively engaged; that his mind was to be enlarged; that he was to discharge certain responsibilities. Then it was that there began to be that progress which we have witnessed in the state of Kentucky and in the city of Louisville. I have to-day in my mind three gentlemen who are occupying positions of educational work in the city of Louisville, who are the peers of any three men anywhere in this nation; and they are colored men, who have by indomitable energy, who have by perseverance, risen from the lowest round to the highest, and they are occupying those positions with distinguished honor in our State. And it does me great honor to-day, to say this to you and to communicate to you that we have all of the plans, all the facilities, and all the schemes by which the colored boys and girls of the city of Louisville and the state of Kentucky are rising to positions of usefulness and trust, within our borders. Therefore the great thing to be taught is, that a man, whether he be white or black, whenever he shall indicate that there is something meritorious in him, and not before this, can take his rank socially and politically.

Now I wish to say this in conclusion. It does us good to come up here and receive inspirations from you. It does me good to come and look in your kindly eyes. It does me good to realize when I look over this vast assemblage, that I do not stand isolated, as I seem to when I am at my home. After coming here before this grand army, sparkling with intelligence and wisdom, I can go back home with renewed energy and determination to continue the fight in this great contest against ignorance and vice. I want to say to you, that we are in this army, and that this contest must continue until our fair land is freed from this insidious foe; until every boy and every girl within the boundary of this country shall be so enlightened as to see what are the secrets of success in life, and become strong in the pursuance of that which is right and true and beautiful and good. Until the reflex influence shall be such as to leave our nation far above all others, as the very embodiment of that which is right and just and true in itself. Let us put our hands together—those of the North into the hands of the South, those of the East into the hands of the West, and say that there shall be a war of extermination, until ignorance and vice shall be banished from our country; and say in the motto of my State, “United we stand, but divided we fall.”

MR. JOHN BALDWIN, of Texas.

Mr. President, Ladies, and Gentlemen:—In addition to the remarks to which we have just listened, I wish to say that the same state of affairs exists, I believe, in all the southern states. In Texas, by constitutional enactment, the black man is placed on an equality with the white man. The constitution provides for a State University of the highest order, for the education of the colored youths, which has been located at Austin. We sustain a Normal school for the training of colored people. The State pays board, books, and tuition. In every city and town in the country where provisions are made for the education of white youths, the same provisions are made for the education of the colored people. I wish, Mr. President, to simply say this, that all over the South the colored people are taking hold with great earnestness in this educational work. They bend everything to embracing the opportunity. We have in Texas a large number of the best equipped educational institutions, sustained by the various churches, for the education of the colored people, and these institutions, I believe, are thus pressing forward the work of the education of the colored people over the entire South, with the exception, perhaps, of two or three cities. We believe that many of our schools in Texas will compare favorably with those of any country.

FRIDAY EVENING.—SEVENTH SESSION.

PRESIDENT CALKINS:—*Ladies and Gentlemen:*—At the last evening of our meeting it is customary to depart somewhat from the order of proceeding of the other sessions. I am aware that a great many of those who have participated in our meeting and who have interested and delighted us with their papers and with their remarks, have been obliged to leave the city. But there are many yet lingering here in the enjoyment of the hearty welcome which has been tendered them and of the pleasant associations which they have experienced in sharing the hospitality of the citizens. I shall take the liberty of calling upon representatives from different sections of the country, whom I suppose may be present to-night, to give you a few of their best thoughts in five minute speeches. I believe we have with us a representative from Colorado and I will take the liberty of introducing to you

PROFESSOR I. C. DENNETT, of the University of Colorado, at Boulder.

Mr. President, Ladies, and Gentlemen:—You cannot possibly expect me to represent the great State of Colorado in five minutes. I know that all you can expect me to do is simply to boast a little, and after having been with our good Kansas friends for some ten days, I think I should be rather a dull student if I could not boast,—just a little. But I well know that the people of Kansas boast with reason. I well know that they are great and rich and prosperous and intelligent and temperate and good, and if there is anything else, after having been so royally treated, that you claim, I am sure we will grant it to you, without investigation. I was amused as well as instructed the other day when I heard the Kansas people talking from the platform in relation to this great State; and after they had spoken of their wealth and their [power, and rightly so, and gotten so far up into the clouds that they could not very well get down, what should they do but call upon Professor Canfield of the Kansas University to help them down. But instead of doing that he shot straight up into the sky and attributed all their glory unto God; and I suppose that that is where it belongs. Now, ladies and gentlemen, I think I ought to say one word for Colorado. Colorado is a big state with a little population; but we are growing. She has wonderful resources quite undeveloped but still developing. She pays twenty times as great tax in proportion to the valuation of her property, for higher education, than the great and noble State of Illinois. Colorado is a great big boy, with but few clothes on,

and he is likely to be looked at too curiously by his eastern brethren. I want to say to you who love nature, I want to say to you who love to dwell in pleasant places, come to Colorado. Enter her mountains, sit by her rills and fountains, and hear the gurgling of her brooks. Climb her mountain peaks, and if you never have felt communion with nature, you will feel it there. If you have any weariness or any sorrows, they will fade away. If you are old, it is the philosopher's stone, and you will become young. If you have never listened to the voice of the Deity, stand there in that grand amphitheatre with the spires towering upward and looking downward upon you, and you will listen to the voice of the Deity there. If you have never listened or understood what revelation meant, there, as you look up toward those mountain peaks, towering above the clouds, you will find the interpretation, of nature and of divinity, and you may realize what revelation means. I most cordially, in the name of the people of Colorado, invite you to come and see all for yourselves.

PRESIDENT CALKINS:—There is another large state in the West, not quite so far towards the north as Colorado, concerning which it has been stated that it is not only larger in area, but larger in its school funds than any other state and that it has the youngest state school superintendent. I do not think he is present to-night but I believe we have a principal of one of their Normal schools, whom I will call upon, H. T. Kealing, principal of a Texas Normal School.

MR. KEALING (Colored).

Hailing from a State, princely in its domain, unparalleled in its resources, lordly in its munificence, I would be a degenerate son if I did not give her words of fond recollection here to-night. Speaking to a noble people, upon the sacred soil of a State equally grand with my own, in all except the extent of area, I would be an ungrateful guest if I did not voice her praise. Speaking as a representative of a race as yet unfathomed in its powers, untried in the higher walks of civilization, yet struggling forward with strained nerves to reach the goal, desired of all nations, I would be but a traitor's mouth-piece if I did not mention their aspiration. Addressing you as a humble worker would address the assembled wisdom and experience of his class, I would indeed be presumptive if I did not plead my zeal in the work as an extenuation for daring to join the ranks of this great brotherhood.

Friends have praised the negro for his progress; others have pronounced him a failure; but the negro has never *blushed* with pleasure at the praise, nor with anger at the criticism, because on account of a peculiarity of his cuticle, he was born to blush unseen. I might further state that with all the boasted advantages and rightfully boasted, which

Kansas possesses, and the noble-hearted people of Kansas, that there is one regard in which the negro stands vastly superior, and as a model for the world. Did you ever notice how anxious white ladies are to curl their hair? God curled ours.

But to be serious. Friends, there is much ground for those who speak against us and there is ground for those who speak for us. The negro is now standing at a transition period, when the old elements are clashing in daily warfare with the new. That time is seen in nature when the howling blasts of winter meet the spring upon the battlefield of March. That time of transition is seen again in nature when the seed bursts the shell and kernel and comes forth. This is all but the marching and the counter-marching in the strategy to overcome the disintegrating tendencies of dead matter. And so with the negro. The cotton patch and school-house in the South are contiguous. The old man, bent and bowed with the sorrows of a past life walks side by side with the bright-eyed urchin, of active limb, in the present, and we believe that out of all confusion, out of this mixing of the good and bad, out of lack of definiteness there will finally evolve order of a higher kind than we have yet seen.

For right is right,
Since God is God,
And right the day must win.
To doubt would be disloyalty,
To falter would be sin.

A word about the peculiarities and traits of the negro; they are but as the weeds that attest the fertility of the soil. As the product of the learning which the great body of noble men and women have conveyed to us; as the product of the liberality of the State and the sympathy of the white educational forces of our State, we have learned that freedom means not only physical emancipation, but disenthralment of the mind; that he is the free man, whom the truth makes free.

PRESIDENT CALKINS:—I will now take the liberty to call upon

JOHN HANCOCK, of Ohio.

Ladies and Gentlemen:—I will tell you a secret; and that is that the President never said a word to me about my speech until this moment. I feel very much as Hawthorne did on a certain occasion;—I wish I could feel more as he did on other occasions. He was invited to a great public dinner in England, but being a very modest man he had made arrangement that he should not be called upon to make a speech; but in violation of that arrangement, as the President has just done, Hawthorne was called. He was enjoying the efforts of his predecessors in their attempts to be eloquent, and chuckling to himself that he was having a good time generally, but suddenly being called upon, after the confidence he had re-

posed in the President, he said, "I knocked upon the door of my mind and found there was nobody at home." In that respect I resemble that man. Now, the people of this country think that the people of Ohio are always striving to put themselves in any places that may be open, but that is not the fact. Now, I think I can say of Ohio, as Daniel Webster did upon a certain occasion of Massachusetts. I remember, sir, this may not be entirely new to most of the audience. "I shall enter upon no eulogy of Massachusetts, she needs none; there she is, behold her for yourself." So I shall enter upon no eulogium of Ohio; she needs none. I will enter upon, however, an eulogium of one or two of her daughters. We are accustomed to call Iowa—I do not know whether there is anybody here from Iowa to-night—but we are accustomed to call Iowa one of the daughters of Ohio; and we also remember that Kansas is another daughter, and I was going to say something complimentary of those daughters—go right on with your cheering it does not embarrass me in the least. Those two daughters are exceedingly goodly to look upon. In other words, they are handsome girls; they are intelligent girls, they are lovely, altogether lovely, and I am glad to see so many of them here to-night. Now I want to say to those young people who have gone out from Ohio,—some of them went out thirty years ago,—I want to say to those who came out to live in the West, leaving our state thirty years ago, that you look about as you did when you started. You seem to have the same vigorous and youthful look. I suppose it is because of the climate. I would not have supposed that this climate was so good. You know generally that children away from home always carry with them good wishes and the prayers of the friends they leave behind, that they may grow up and do a good work in the world. And that is the way we think about those who have gone from us to Kansas and Iowa and Minnesota. We have them still farther away, in San Francisco. That is about the only riches we have, the riches of these children that we have sent out. You know that old Roman lady, who had not any particular amount of this world's goods, said that her jewels were her two boys. Now, our two girls are our jewels; so are our schoolhouses that I have just mentioned; and we are expecting to bring other jewels of the same sort from Ohio until we have them reaching from the Buck Eye state to the Pacific slope. I hope this Association—and I know I shall please my friends in San Francisco when I say that, will go from Kansas over to Colorado and see those mountains that my friend so eloquently describes, and feel that the earth is wider and that it is a good place to live in, and that we shall have kindly feelings from one end of this continent to the other. Ladies and gentlemen—now you will see, I think, without a moment's hesitation, that this is altogether an unpremeditated address. Now, please call upon somebody who has been meditating, and you can tell it in a moment from the way he starts out.

PRESIDENT CALKINS:—We have some states in the Union that are not as broad as Kansas, nor as wide as Texas, nor as far toward the setting sun as Colorado. I will introduce to you, to-night, a representative of the smallest state in the Union—Mr. Littlefield, Superintendent of schools of Newport, Rhode Island.

PROFESSOR LITTLEFIELD'S ADDRESS.

Mr. President:—I am very glad to have an opportunity of briefly addressing this distinguished company, for the sake of the personal acquaintance, which I trust will be vouchsafed to me hereafter by my hearers through the very kind introduction which I have received. I need say nothing about Rhode Island. She stands there, the author of the American school system, by herself, as stands the old stone mill with lofty tower, which to this very hour stands looking seaward.

My thoughts this evening are perhaps broader than our little state, having had the privilege, during the past two weeks, of attending great educational conventions at Bar Harbor, Maine; at Niagara Falls, New York; and to cap the climax here in Topeka. My heart is full this evening, sir, with boundless gratitude, for the wonderful development of education in this land. Whenever we consider the mighty facts, whenever we stop to consider that our American school system has become, in many respects, the model for the school system of foreign nations; that our country spends four times as much money for free education as any other country in the world, and that we with our three hundred thousand teachers, against one-fourth as many lawyers and one-fifth as many doctors, have doubled the number of pupils, teachers, and normal schools of any other country except Germany and one-third more even than she; when we consider the phenomenal growth and prosperity of the public schools, we ought, as we do, to take great pride in them; especially on such a congratulatory evening as this, at the close of a series of wonderfully successful, profitable, admirable meetings with which we have been favored. But we ought not, sir, on account of the proud position of the schools, to lose sight of the still larger possibility of the future. The common schools, in my judgment, praiseworthy as they are, are not yet half-way up the eminence of their possible attainment. If they expect to maintain their foremost place they must continue to wave high the banner of educational reform. We have the influence of earnest teachers who have made a study of the situation, and the results are of the greatest importance.

PRESIDENT CALKINS:—I will present to you Daniel B. Hagar, Principal of the Normal School at Salem, Massachusetts, and President of the National Council.

ADDRESS OF MR. HAGAR.

Mr. President :— Quite a number of years ago a good deal was said in old Massachusetts about a place called Kansas ; and so much interest was excited by what was said about Kansas, that quite a large number of our Massachusetts men concluded that they would come out here a-gunning. They came with their guns, and I believe, to some extent, they used them. At any rate it was so reported. Now those men settled here in Kansas, and their sons and their daughters are here, and as a Massachusetts man I am delighted to see you. I have no doubt you will be glad to hear a little from the old homestead, as to how are affairs in old Massachusetts. You know down in Massachusetts we never boast ; we leave that to other states ; but I will say for the gratification of the descendants of Massachusetts who may be present, and who reside in this goodly country, that Massachusetts is where she was. Somebody, I think, has said there is a Bunker Hill. I am happy also to say that the greatest teapot that the world ever saw — a teapot that required three hundred boxes of tea to supply one tea party — is still down in old Massachusetts. Cape Cod still projects into the Atlantic Ocean ready to show itself to any foe. Educationally, Massachusetts is by no means stationary. No longer ago than 1839 the first State Normal School ever established in the United States was opened in that historic town of Lexington, with just three pupils, and that was the beginning of the normal school system in this country. Now Massachusetts has five State Normal Schools, all filled. She has also an Art Normal School — I believe the first and only State Normal School in America ; and it has by its success satisfied the people of Massachusetts that the school ought to continue. And there are, arising in Boston to-day the walls of an \$80,000 building for the exclusive use of a free State Art Normal School. We think that Massachusetts is doing a little something. Mention was made by some one, in the course of the evening, on the subject of tenure of office, on the part of the teachers. We have had a struggle in the Massachusetts Legislature for several years past in regard to this matter of tenure of office. At its last session the Legislature passed a law to this effect, that every school board in the State is at liberty, after a teacher shall have labored one year, to elect that teacher for an indefinite time ; and hereafter teachers will stand the same as members of other professions — as lawyers and doctors and ministers, upon their merits. They will not be subject to eviction at the hands of persons who perhaps may not be acquainted with their merits, and who cannot always be good judges of what teachers ought to be. This is all I have to say in regard to Massachusetts. I would simply add that we rejoice in the prosperity of this great State of Kansas. We rejoice with you as with our other brethren. We are all one, and probably no other state in the Union would be so likely to excite the sympathies

of Massachusetts as this very state of Kansas. The two states struggled together years ago in behalf of Freedom. They are working together now in behalf of education. And I am glad to say from what I have seen, since I came to Topeka, the results of the work of your teachers shown in the exhibition which I have had the pleasure of seeing, I am satisfied that Kansas is far in the van in the cause of education, and that she is doing a grand and noble work for mankind.

PRESIDENT CALKINS :—I think the audience would be glad to hear from a representative of the State of Illinois. We have present to-night Mr. Robert Allen, Principal of the Normal School at Carbondale, Illinois, whom I have the pleasure of introducing.

MR. ALLEN'S REMARKS.

*Mr. Chairman:—*I noticed in looking yesterday and to-day at the register in the headquarters of the State of Illinois that there were a few more teachers from Illinois enrolled as Kansas teachers than there were teachers from Illinois itself; so that I reckon Illinois has done something to supply Kansas with teachers. It has been claimed here that Kansas is a daughter of Ohio, but I think she is quite as much a daughter of Illinois. Illinois has contributed very largely to the population of Kansas. It is a very large state; not as large as Kansas in territory by any means, but it occupies a very important position in the United States. If you would study your geographies a little and observe Illinois, you will see how far it goes to the north, by its connection with the lakes, and how it reaches south by its connection with the Mississippi River. It is not as Pennsylvania has been called, the Keystone. It is not called the keystone, but it is absolutely the keystone in the great arch of the States, touching the north and touching the south. It is a state standing in the middle of the nation; and through that state four times a day there go the great continental railways, weaving like needles into the woof of this great nation. The State of Illinois is a State of honest men, and it is glad to send a good many of those honest men further west. When I began to learn geography, the West was written as the "Great American Desert." When I began to study geography they used to ask the question, "What are the chief cities of Illinois?" and this was the answer: "Kahokeas, Edwardsville, Vandalia, and Kaskaskah"; but none of you know the names of those places. Edwardsville is left; Kahokeas is washed into the Mississippi River; and Kaskaskah—who knows anything about it outside of the old settlers of East St. Louis? That was geography then, and a thousand miles west of that was this immense State of Kansas. I asked a man this evening how many counties there were in Kansas. "I can't tell you," he said; "there might be a thousand or a little less; we are making a county a day." And to those new counties are going Illinois

men and women. You lay out counties here in Kansas, and Illinois is filling them up with school teachers and farmers and merchants. I am glad I have been in Kansas this time. And I remember when I was in Rhode Island a good many years ago. There was my friend Dr. Vail, who was a good friend to Rhode Island, and who is now a good friend to Kansas, and he did a good deal for education in Rhode Island, as I have no doubt he is doing for education here. I say I heard about Kansas in those days and I have had a sympathy for Kansas ever since. I have been here once before, and what surprises me, and delights me too, is to see how the State is growing up, in what were then all waste places. Kansas has helped to make American history, perhaps, as no other state has, but in doing it, it chose men of other states. And I trust that she will still continue in her good ways.

PRESIDENT CALKINS:—If my geography is not at fault, there is a very large state lying between Illinois and Ohio and the State of Kansas; and I should like to hear whether any of those who left Ohio for the West or who left Illinois for the West, stopped on the fertile plains of Missouri. I will introduce to you Professor R. C. Norton, President of the Missouri Normal School.

MR. NORTON'S ADDRESS.

*Mr. President, Ladies, and Gentlemen:—*I thank you for cheering at the opening, lest I should have no cheers at all. I hail at present from Missouri, a state seemingly not frequently mentioned, but yet one of which we Missourians are very proud. If I go back to 1861, I see the hosts of Ohio—some of the boys of Ohio under the leadership of the gallant colonel of the 48th, leading us to Southern fields. You know there was quite an invitation for us to go south then. Some of those brave boys in blue never returned. Some have; but out of the ashes of those who lie buried there have arisen some of the most glorious achievements of our nation. And before us to-night in the product of one eloquent and learned, of the colored race, we see the possibilities that are being brought out of those who hitherto have been held down. And fellow teachers, whatever you may ask from Ohio, whatever you may ask from Maine, Rhode Island, or Texas, we will grant it all and believe all you say, for we think your possibilities are beyond our comprehension. But, teachers, as we meet here, we feel that we are meeting friends and acquaintances, though we had not hitherto seen them. I feel acquainted with Mr. Calkins, with Mr. Brooks, with Mr. Allen, and all those who have given us invaluable treasure in their works to which we as teachers may come and take counsel. Teachers, a great responsibility rests upon us; and as a teacher from Missouri, and before the National Teachers' Association, let me make this assertion: that never shall that book of books, which is the

anchor of my liberty on earth, and the light of my hope hereafter, be either by my word or my act or my consent, banished from the school in which I labor. We shall find no equal in modern writing to him who said, "The firmament showeth God's handiwork."

Now with this thought before me, let me pass back for a few words for Missouri. The words "border ruffian" have not given a peaceable idea of the State; and the "Younger Boys" have been known far and wide; but let me tell you that now they are gone. In those days the State had been devastated by war and by the marching and counter-marching of armies; but out of that State has arisen, in 1886, the grandest school fund that there is in any state of the Union. We have to-day over \$10,000,000 in a productive fund for the common schools of the State of Missouri, and I believe that those schools are growing in the affection of our people, and as they are growing they are producing a sentiment of patriotism, until now the people of Missouri are shouting the glad song of the poet Longfellow and saying,

"Sail on, sail on, O ship of State."

PRESIDENT CALKINS:—I now take pleasure in introducing to you a representative from "Old Virginia," Julius D. Dreher, President of Roanoke College.

ADDRESS OF MR. DREHER.

Mr. President, Ladies, and Gentlemen:—I did not come before you to-night to speak for the State of my adoption, nor for the State of my nativity. I come to speak to you as a citizen of our common country. A year ago I went to the Northwest and on to the Yellowstone Park. And as I travelled over this long distance, I began to realize, as I never had before, the wonderful extent of this great country, and I traveled from Kansas to the Pacific coast and saw more and more of this great country and our wonderful institutions. And as I saw the noble men and noble women, who are the pride of our country, my admiration rises higher and higher as I say "This is my own, my native land." I am glad indeed to be here in this great State of the plains. I am glad to see something of the fertility of the soil; and if the old Virginian, who is said to have gone for the first time to New York City and to have stood before the Grand Central Hotel and watched the throng as they passed up and down Broadway, and to have said in wonderment, "Where do they get enough for all to eat?"—could that old Virginian have been with me on the Union Pacific train from Kansas City to Topeka, I could have told him that here is where the bread shall be made for millions of people.

I have heard a number of references to the history of Kansas. You can well imagine that, born and reared and partly educated in South

Carolina, and now living in Virginia, an ex-confederate soldier, whose home lay on the line of Sherman's march, that I hear all those references with a mingled emotion. But I am also happy to add that I rejoice most heartily, as heartily as any one in this house, that no institution of any kind separates the patriotic heart in our common country. I rejoice that from the South to the North and from the East to the West we all meet here, earnestly engaged in this great cause of universal education.

PRESIDENT CALKINS :—I think it is due, after so many flattering allusions have been made to Kansas and especially to Topeka, that Topeka be allowed to speak for herself. I will introduce to you Mr. John McDonald, County Superintendent, of Topeka.

MR. McDONALD'S ADDRESS.

Mr. President, Ladies and Gentlemen :—You have heard all about the State of Kansas, that it is 400 miles long and 200 miles wide and 8,000 miles deep; you have heard of the fertility of the prairies; that we have the biggest grain in the world, and the finest farms; and last but not least you have heard repeatedly that the people of Kansas are the cream of the East. I have no doubt that our eastern visitors must have been struck by the cool modesty of the natives of this city and State. I have no doubt you have noticed time and again in the speeches as delivered by the natives of this State, that excessive modesty is our distinguishing characteristic. I may say, with my brethren of Kansas, that I am glad this Association has come here. If this meeting of the National Educational Association does not inspire the people of Kansas to do infinitely nobler and greater things in the future than in the past, if it does not lift us as a people to a higher plane of educational thought, then this meeting has been in vain. But I do believe that this meeting has inspired us; that the inspirations will go out from this centre to every part of the State, and I have no doubt that this meeting in closing to-night will be glad to sing the doxology to a long meter, and I know that 1300 Kansas people will be ready to pronounce the choicest benediction on the National Educational Association.

PRESIDENT CALKINS :—We should like to hear from the broad plains of Kansas, and I take pleasure in introducing to you Dr. Brown, President of the Highland University.

DR. BROWN'S ADDRESS.

Mr. President, Ladies, and Gentlemen :—You have heard so much about our great State that I hardly feel warranted in saying more. But there is a great deal of Kansas outside of Topeka—perhaps not much to speak of in the minds of some people, but still there is. You remember that motto

that Kansas adopted, "*Ad Astra per Aspera*"? I tell you that is a good thing to think about sometimes. "*Ad Astra*" stands before our physical, mental, material, moral and spiritual welfare. And I have no hesitation in saying for the people of Kansas that they feel universally that the meeting of this association has been a great help to them. A gentleman from Indiana said to me this morning, "Have you noticed what good-looking men and women come to us from these eastern states? They seem to be so much better looking than those that are already here." I said to him they are teachers; that the teachers in any community as a rule are the best looking people, just as they are likely to be the best people. Then in the second place, teachers that attend the National Association are the best looking teachers among all teachers. Do you notice how many of these states seem to be proud of the fact that so many of the teachers and people of Kansas had come from their state? Surely Pennsylvania was a fine State to come from. Indiana is a good state to come from. Rhode Island is a small but a great state to come from. There are a great many states that are splendid to come from. I have heard it rumored that there are a great many of these fine school "marms" who have come out to Kansas who may not get back. I have an idea that such a thing might possibly happen. We have been glad to welcome you.

CLOSING REMARKS OF PRESIDENT CALKINS.

Ladies and Gentlemen :—Citizens of Kansas and of all the other states that have contributed to make Kansas what it is to-day: I know that you would be glad to hear also from other states, but the hour is too late. We must close the exercises of this meeting of the National Educational Association. When I came among you and received the welcome of the citizens of Kansas; when I saw from day to day the incoming of teachers from every part of the country; when I heard those who came speak of the pleasure which they had experienced; I am happy to say that I was glad, as I know many others are, that we came to Topeka. I do not know but some of you may be glad when we are away—some of the citizens of Topeka, whose hospitality we have shared, and who have themselves experienced many inconveniences that we might be made comfortable and happy during our meeting.

And now, citizens of Topeka, in behalf of those who have been so royally entertained by you, I want to thank you for what you have done in behalf of this 26th meeting of the National Educational Association. And I trust that we shall all look back to this meeting and rejoice in the day that brought us together to exchange hand-shakings and greetings; and that all of us may long remember with pleasure the occasion that enabled us thus to become better acquainted.

And now I have to discharge the last public duty as the presiding officer of this Association—a duty that affords me great pleasure.

[Addressing Mr. Sheldon, President Calkins continued.] You, my dear sir, my fellow laborer in this educational work for many years, you are my senior here, although you claim to be the boy of this Association. For three years before I was admitted as a member of this National Association you had been laboring in it. Now I want to congratulate you upon having attained your majority; I want also to heartily congratulate this Association in having crowned you with the Presidency. And I now take pleasure in passing over to you, my worthy successor, this emblem of the office and of the honor conferred upon you. In resigning this gavel to you I know that it goes into faithful hands, that will wield it wisely.

RESPONSE OF PRESIDENT-ELECT SHELDON.

Never, in the experience of my life, have I attempted to utter a word, with such a profound sense of weakness and with such a burden of responsibility as I feel at this moment. For twenty-eight years it has been my happy lot to enjoy the Association and reap the improvement that has come, educationally, fraternally, socially, and spiritually from it. And in assuming the responsibility of the President's chair, to which I am called,—I remember the great educational workers of America that have occupied that seat,—Richards and Rickoff, Wells, and Philbrick lamented by all, Wickersham, Hancock and Hagar, and last, but not least, my veteran brother and friend, Calkins, who has in spirit and act met the great requirements known only to those who have some intimation or knowledge of the great care, responsibility and effort that are required by the numerous details of such a grand meeting of educators as we have enjoyed here in the city of Topeka,—I know my shortcomings; I know that with all the effort that I may make, with all the loyalty that I feel in my heart for the cause of education, with all the experience of the past, that I must throw myself upon your sympathies, claim your indulgence, and ask for your hearty co-operation as I attempt to discharge the duties that will devolve upon me for the year to come. All that strength of mind and body and experience have given to me in the past are at your service, freely and heartily. I hope that when the annual meeting of the National Educational Association for the 27th year shall have rolled around, and we are gathered somewhere between the gulf and the lakes, the Atlantic and the Pacific,—I do not know where to-day,—that we shall have the high pleasure and honor of greeting every faithful laborer from the Kindergarten to the University, in sympathy and by their personal presence

co-operate and help us to carry forward this great work which is certainly the basis of our free Republican institutions, and is really the hope of our land. Education will drive from our fair land those vices and immoralities that have been the curse of every people, and crown our intelligence with dignity and loyalty to the great Master whom we all should follow, and whose life should be a model for every teacher.

But I must not detain you with my words. I must show my work by my deeds in the time to come. And now, as is our custom, in the closing exercises of the National Association I ask you all to rise and sing the doxology in long meter.

“Praise God from whom all blessings flow,”

led by Dr. Hagar ; after which I will ask the Right Rev. Bishop Vail to pronounce upon us the benediction of Almighty God.

REPORT OF THE COMMITTEE ON NECROLOGY.

The Committee on Necrology for 1885-86 beg leave to submit the following report. We have to record the decease of four very eminent and widely known educators who have been very effective and conspicuous workers in the field of educational effort. Some others may have died, but your committee have not been able to obtain reliable information concerning them.

We respectfully submit brief sketches of the life and labors of John D. Philbrick, LL. D., of Massachusetts, J. Norman Steele, Ph. D., of New York, Ariel Parish of Connecticut, and F. R. Feitshans of Illinois. The last named died at Denver, Colorado, only a few days after the meeting at Topeka, where he took an active part in the Association. It was deemed fitting to pay a tribute to his memory in this year's report. We are indebted to Charles Northend, of New Britain, Conn., for the sketch of the life of Mr. Parish; and to others for facts in regard to the lives of the others noticed.

Respectfully submitted,

W. E. SHELDON, Chairman.

JOHN D. PHILBRICK, LL.D.

John D. Philbrick was born in Deerfield, N. H., on the 27th of May, 1818, and died at Danvers, Mass., on the 2d of February, 1886. Mr. Philbrick received his collegiate education at Dartmouth College, from which institution he graduated in 1842. While a student in college, he was noted for his industry and his perseverance. He entered college for a purpose, and he never lost sight of it until it was fully accomplished. He early chose teaching for his life work, and from that time he studied with reference to preparing himself for the duties of his chosen profession.

In the year 1837, and for one or two years later, Mr. Philbrick was a teacher in the town of Danvers,—now Peabody and Danvers.

Mr. Philbrick taught the same school for three successive winters during his college course. At that period, teachers' meetings were almost unknown, and the helps of any kind for teachers were rare indeed. As there were some twelve or fifteen male teachers in the town, many of them college students, they formed a sort of association among themselves, and met occasionally in different parts of the town. These meet-

ings were both pleasant and profitable, and were greatly enjoyed by Mr. Philbrick, who ever evinced the determination to make the most of his abilities and opportunities.

On graduating from college, he came to Boston and entered at once upon his chosen work, beginning as assistant teacher in the Latin school in Roxbury. The same qualities of mind and heart exhibited themselves in his practical life as a teacher, that had distinguished him through the years of his college course as learner. He was industrious in preparing his daily tasks and persevering in the application of his methods of teaching and control.

His success as a teacher attracted attention, and in 1844, he was transferred from the Roxbury school to the English High School. In 1845 he was made master of the Mayhew School. Three years later he was appointed to organize the Quincy School, the first of the present system of grammar schools of the city.

Early in his educational career, Mr. Philbrick gave evidence of possessing a rare degree of organizing power. In the exercise of this power he exerted, perhaps, more influence over the organization of the schools under his charge, than over the philosophy and methods of teaching accepted and practiced in them. In 1852 he was called from Boston to New Britain, Conn., to organize the State Normal School, established two years before in that town, for the training of teachers of the public schools.

By an act of the Connecticut legislature, passed in 1849, the office of Superintendent of Common Schools and that of Principal of the State Normal School were united. Mr. Philbrick accepted the twofold office, and did all in his power to perform well the responsible duties committed to his care. As principal of an important educational institution, and as superintendent of a system of schools, he did enough for Connecticut to eventually provide for her public schools better trained teachers, and for the teachers themselves a more generous support.

By invitation of the school committee of Boston, he came back to Massachusetts in 1857, and commenced what proved to be the great work of his life,—the reorganization and direction of the public schools of the city. Mr. Philbrick was superintendent of the public schools of Boston from 1857 to 1874, and again from 1876 to 1878, and when he resigned his office, he left these schools the best organized and conducted public educational institutions in this or any other country.

Mr. Philbrick performed some important educational service outside of his labors as Superintendent of Schools.

Mr. Philbrick was for eleven years an active and prominent member of the Board of Education of Massachusetts. His broad, generous views of education, his intimate acquaintance with the actual working of our public

schools, and his warm sympathy with teachers, made him one of the most valuable members of the board. His chief duty as a member was in connection with the normal schools of the State.

One of the most marked departures from the customary course of common school studies, during the term of Dr. Philbrick's membership of the board, was the introduction into the schools of elementary instruction—industrial drawing. In response to a petition from some of our foremost citizens, seconded by the Board of Education, the legislature, in 1870, passed an act introducing industrial drawing into the school curriculum in cities and towns containing more than 10,000 inhabitants. But brief experience under the law made it apparent that special preparation of teachers for this work was necessary to give definiteness of aim and adaptation of methods to the end in view.

Out of this discovery, among other instrumentalities, grew the State Normal Art School. To Mr. Philbrick more than to any other one person are we indebted for the Massachusetts Normal Art School. The necessity for such an institution became apparent to him at the outset of the movement, and his experience as an educator enabled him to see, with perhaps greater clearness than others, its necessity in order to carry on the work throughout the State.

He was appointed by the government to represent the United States in educational affairs at the Vienna Exhibition, in 1873, and again at the great Paris exhibition in 1878, of which he made elaborate and able reports. He organized and superintended the Massachusetts educational exhibit at Philadelphia, in 1876, and did his work with so much skill and good judgment, that the products of the public schools were judged to be of the highest excellence.

Mr. Philbrick has contributed much to our educational literature by his able public addresses, and by his valuable school reports, which have embodied his best thoughts on a great variety of educational topics. These reports will be read, I am sure, with increasing interest by all educators who have access to them, as the years go by.

Mr. Philbrick was a member of that association of gentlemen, who, interested in the professional applications of science, and in the practical and fine arts, began to form those ideas, which, after struggling for a long time for an opportunity to make a material expression of themselves, finally, on the eighth day of April, 1862, were organized into the Massachusetts Institute of Technology,—an institution that introduced at once a new and most important element into our systems of education. From the day of the organization of this distinguished institution to the time of his death, Mr. Philbrick was a member of its corporation and of its committee on instruction. He was an earnest and intelligent friend of the Institute, for he was deeply interested in its objects and its methods.

In his written words, found at the close of what he thought to be his last report to the School Committee of Boston, are expressed the great principles of action by which he was moved throughout his educational life:

"For upward of thirty years,—all but four in this city,—I have occupied without the intermission of a day, various positions of service in connection with the public schools. Here my professional career has been run. It was the career of my choice, and my highest ambition. My heart has been in it. It has afforded me the desired opportunity for making my humble contribution to the general welfare. I am thankful for it. I shall never cease to be grateful to all who have co-operated with me in my efforts to make the Boston public schools the best in the world; and I will venture to say that I ask no ill thing for the cause, when on parting from this place, I pray that whomsoever you shall choose to succeed me, he may resemble me in the uprightness of his intentions, and surpass me in the degree of his abilities."

His reports as superintendent of the Boston schools, so admirable in contents, spirit, and diction, and his more recent papers on current school questions, will be consulted a few years hence as the wisest contributions of these days. His comprehensive papers on "City School Systems," published in 1885 by the Bureau of Education, and on "School Reports," submitted to the National Council at Saratoga, in 1885, embody wise experience, patient research, and profound wisdom.

His educational contributions were luminous with insight into the relations of practical methods to the history of pedagogy. He was a city set upon a hill. He never wrote a paragraph without considering the relation of its doctrine to the theory and practice of the world. The effect of his writings, therefore, was a broadening one. Teachers learned from him to look at their work from an elevation, and to take in its perspective.

His reports, addresses, and contributions to the educational and other periodicals, have covered a wide range of topics, and, estimated by any fair standard of judgment, place him among the foremost men of his age as an educational authority on questions bearing upon the policy to be pursued to secure the highest results for the good of the State.

On methods of instruction, as presented in his reports and illustrated in his work, he was a *conservative reformer*,—holding with tenacity to what he believed to be valuable in the experience of the past, and welcoming new ideas and methods that would be useful in improving the common schools.

His writings are prolific and varied in character, covering almost the entire range of subjects bearing upon public education. Among his earlier papers was one written and read upon *School Government* before

the American Institute of Instruction in 1848, in which he outlined the principles of school management and the practical relations of the teacher to this department of school work, with great force. In 1850 he again addressed the Institute upon *The Characteristics of the True Teacher*, a model paper, and one which may be studied with great profit by all who to-day seek for an analysis of the qualities which are essential to success in the work of teaching.

His reputation was deservedly world-wide. His name will ever be a household word among educational men, not only in New England, the South, the great Northwest, and on the Pacific slope, but also in England, France, Germany, Austria, Russia, China, and Japan. The high reputation of the schools of Boston, the world over, depends, probably, more upon what John D. Philbrick did for them and wrote and said about them, than upon any other cause.

He received his high degree from Bates college in 1872. The record in the last Triennial is as follows: Johannes Dudley Philbrick, Curator, Dart.; 1842 et Mr., Superintendent Bostoniae Scholarum, LL. D.; Univ. Sancti Andreae apud Scotos, LL. D., 1878; Officier de l'Instruction Publique, France, 1878; Chevalier de la Legion d' Honneur, 1878.

J. DORMAN STEELE, PH. D.

Dr. J. Dorman Steele was born in Lima, N. Y., May 14, 1836, and in his earlier years received a training calculated to develop the better part of his nature. His mother was a devout Christian, his father a well-known and eloquent minister in the M. E. Church, who was stationed at different times, according to the usages of the church to which he belonged, at Buffalo, Batavia, Lima, Albany, and Troy. The boy, therefore, travelled through the central portion of the State, tarrying awhile at the chief points, during that time of life when habits of observation are the most acute; and we can trace the effect of this early development when, in riper years, he engaged in scientific and educational work. His powers of observation became sharp and comparative,—he could find flowery beauty in the dreariest place; his variety of teachers touched the various chords of thought and aspiration, while home influence wove them into a harmonious web; and, forming but temporary acquaintance anywhere, home became to him the dearest spot on earth, and the heart centered in its scenes, its loved ones, and its quiet.

Although full of boyish life and humor, there was nothing coarse or heedless in his nature; he was gentle, though firm and fearless, and having decided on a course, would resolutely pursue it to its conclusion. Naturally studious, we find him in Albany pursuing classical studies, although scarcely ten years old, and two years later a student in the Boys' Academy in Troy, where his father had been assigned to the pastorate of the State Street Church.

In 1851 we find his father stationed in Batavia, and now father and son drain the bitter cup of sorrow. His mother dies, and young Steele is so overcome with grief that a long and dangerous sickness ensues, in which for days he lies in an almost even balance between life and death. But he lives to cherish her memory and carry her teachings into daily practice; and so great was his love for her, that ever afterward the surest way a boy had to gain a place in his heart was to give some evidence that he loved his own mother.

In 1853, when scarcely seventeen years of age, we find him making his first attempt at teaching in a country district, where he received twenty shillings a week and "boarded round." The occupation did not suit him, and he gladly left the schoolroom to render his father temporary aid on the farm he was then occupying. This work done, life's great battle began. Young, hopeful, honest, studious, genial in heart, strong in moral principles, but limited in means, he began the struggle, and for a short time we find him in New York, a clerk in a Broadway bank. Although he proved to be a competent accountant, the work was not congenial, and in a few months he left the bank to accept a position in the Methodist Book Concern. Now he is surrounded with books, and the choicest literature of the land is before him on the tables and the shelves. In odd moments and after business hours he can be storing his mind with garnered thought. Science, art, travel, history,—works he can never hope to buy,—are around him, and he can glean from them all. The managers see his quiet, manly, studious habits, and books are given him to review and then keep for his own. His early training, his keen penetration, and well-balanced judgment are manifested in the reviews he gives for publication; and the boy,—not quite eighteen,—sees his written work in print. The little shelf, in his room is growing heavier with the books he has procured by his own mental effort, and unconsciously he is becoming prepared for the author-work of his riper years.

One day it is said to him, "Dorman, you ought to go to college." The suggestion ripens into a wish, the wish into a hope, and the hope into realization, for we find him in the fall of 1854 enrolled in Genesee College, at Lima, N. Y. But his means are limited, and he spends the vacations in the harvest-field or in teaching, to eke out the scanty store. By persevering industry he makes his way through, is graduated with honor, and accepts a position as teacher of science in the academy at Mexico, N. Y. He discharges so well the duties resting upon him, and manifests such administrative ability, that the next year (1859) he is offered and accepts the position of principal, made vacant by the resignation of Dr. French.

Life now seemed to have an easier turn and Dr. Steele to have found his true position, but he appeared to have for his motto, "God and my

country," for when the civil war began he resigned his position, joined a company, and leaving school and a young wife, hastened to the front. He was chosen captain of the company, which entered service as "Company K, Eighty-first New York Volunteers." Again Dr. Steele was being unconsciously prepared for his after-work as an author of school histories, for all the vicissitudes of a soldier's life were his,—the *ecolat* of the marshaling in arms, the camp life, the ringing battle, the reception of wounds, and the days of languishing in the hospital. One reads with wonder and admiration the calm, dispassionate, unprejudiced pages of his American history which are devoted to our civil war. Careful and considerate, he endeared himself to his men, heroically led them in engagement, and although severely wounded in the first volley, cheered them on during the battle of Fair Oaks, or Seven Pines, until exhausted by loss of blood he was borne to the rear and the hospital. Incapacitated by his wound, and the long fever that followed, from further service, he resigned his commission and returned home to recuperate slowly under the careful nursing that was given him.

When sufficiently recovered to resume active work, Dr. Steele became principal of the academy at Newark, N. Y., and successfully managed its affairs until 1866, when he resigned, to accept the charge of the Elmira Free Academy. By wise counsel, calm determination, and energetic measures he raised the school from the condition in which he found it to its present high position among kindred institutions. Recognizing his worth as a teacher, the Regents of the University of the State of New York, in 1870, conferred upon him the degree of "Doctor of Philosophy," and the same year teachers of the State elected him president of the State Teachers' Association.

While at Elmira, Dr. Steele made his first venture as an author. An enthusiastic teacher, believing in practical work in the schoolroom and excursions in the field, he found the textbooks in use but poorly adapted to his ideal,—they were too didactic in style, too elaborate and exhaustive, and embraced more ground than could be covered in rendering the subject attractive to the young. So he gradually drifted away from them, taught his pupils to experiment with whatever apparatus they could get or make, and, to assist them in their labors, began to prepare daily notes and to give popular lectures. Gradually the material increased until he had more than enough to make a good-sized volume, and he began to think of publishing a portion of it for the use of his pupils. A friend connected with the publishing house of A. S. Barnes & Co. visited the schoolroom, and the subject being casually mentioned of printing a portion of the notes, brought the matter, on his return to New York, before the house. It resulted in a call for the manuscript, and, upon examination, to the publication of his *Fourteen Weeks in Chemistry*. It was a departure

from the ordinary method of treating the subject; it popularizes the study, met the wishes of very many into whose hands a copy came, and evinced the skill of the author. The book had a large sale, and from every direction came the cry, "Give us more books like it; give us books on kindred subjects." Dr. Steele was willing to undertake the task, but the labor would engross so much of his time he could not do justice to the school. For six years he had been its honored head; now he must decide between teaching and preparing textbooks, and he decided wisely in choosing the path by which he is best known to the world. In 1872, he resigned the school, but chose Elmira for his home, and henceforth the teacher is lost in the author. His textbooks have done much in popularizing science and the subjects upon which he has written, and are known not only over our own land, in city, village, and the common rural school, but have been taken in large quantities to the English-speaking portions of Great Britain's dominions, and many of them have been translated into the French and German languages for use in their schools.

Specialists may find fault with his scientific works and claim they are too superficial, but the works were not written for them,—they are prepared for the untrained pupil, who has never yet learned that there are beauty, wisdom, and fascination in science. It was in recognition of the ability to popularize, that his Geology won for him the proud honor of an election as Fellow of the Geological Society, London, Eng., and many a one now working as a specialist in some branch of science had his attention first drawn to science and his enthusiasm aroused by the publications of Dr. Steele.

But it was not alone in science that Dr. Steele has won celebrity. Aided by his accomplished wife he has prepared a variety of school histories, which introduce us to the homes of the people, and make us acquainted with their habits, customs, religions, art, education, ceremonies, and with the growth and decline of society and of the nation. Shrinking from its bloodier aspect, he has sought the cause of war in the civilization of the people, the enactments of law, and the aspirations of leaders. In history, as in science, the publications of Dr. Steele have revolutionized the textbooks used in our schools. To him we are indebted either for the imitative or the successful application of the idea, and in his death there has been, if not an irreparable loss, one that will be long deplored. As time rolls on his skillful hand will be missed in the revision of the books that have done so much to inspire the young, reveal the mysteries of science and the beauties of history, and to lead the pupil to further study of the subjects presented.

We will not enumerate the works issued by Dr. Steele, for his pen, although not prolific, was assiduous. He was an indefatigable worker, methodic in habit and systematic in work. Day after day he carried out

the same program,—rising early, and after a light breakfast, going to his library, where, surrounded by books and gathered material, he wrote for five or six hours on some new book, or toiled over the revision of one already published. His work done, he sought the open air, and either in manual labor, walking, or driving, rested the weary brain; then spent the remaining hours of the day or evening in the companionship of home.

His home in Elmira was a beautiful place, situated at the corner of Clinton and Columbia Streets, built in the most approved style of modern architecture, surrounded by a broad and shady lawn sloping gradually to the street, and called from its architecture or surroundings "The Gables" and "The Cedars." But however attractive it might appear from an external point of view, its great charm was within,—here were wife, son, and niece, to brighten the hours not set apart for library work, and to relieve whenever possible the tedium of his labor.

In early life, while teaching in the academy at Mexico, N. Y., he won the affection and wedded an accomplished lady,—Miss Esther Baker,—daughter of a prominent minister, and, at that time, a teacher in the academy. She sympathized with him in all his struggles, nursed him when returning wounded, sick, and emaciated from the war; inspired him in his labors; assisted with heart, head, and hand, in the preparation of his histories and the revision of his works; watched with a wife's solicitude his declining health, went with him to Europe and Florida when he sought rest, and did all a woman can do to make home pleasant or to stay the lavishment of life. But in vain was her love and solicitude when the idol of home, the model man, the genial companion, the conscientious Christian was called.

And the call came suddenly. During the day, May 25, Dr. Steele had been about his work as usual, and a few moments before his death was out on the lawn in front of his residence. Going into the house after his brief walk, he complained of being chilly and sought the open grate in the library. Soon afterward severe pains were felt in the region of the heart, and his son was sent in haste for the physician that had attended him since his return from Florida, but before he arrived, Dr. Steele expired in the presence of his wife, the members of his family, and a few neighbors that had been hastily called.

In personal appearance Dr. Steele was tall and slim; his hair, brushed straight back, revealed a high, broad, intellectual forehead; his eye was soft and pleasant; his narrow face relieved by dark side-whiskers; his mouth indicative of firmness blended with gentleness. He was quick to recognize the friends he met, his eye kindled at the sight, his voice was cherry, and the grasp of his hand warm and cordial; in conversation he was genial, social, and instructive, his words flowed readily, and one rose from talking with him feeling better and more inspired to action; he was

unselfish, generous, faithful,—ready to praise what seemed to him commendable, and to speak a kind word for all that needed it. It is not saying too much to say he was true and faithful to his work, his friends, his family, and his God. Beginning life under adverse circumstances, by hard, earnest, patient toil, with hand and brain, he gathered a little wealth, and could see in its increase the promise of ease in his declining years; but, with characteristic unselfishness, he balanced his hard earnings against the claims of society and education, and gave a goodly portion to the church of which he had been a consistent member, and to Syracuse University,—his *alma mater*. Wealth was to him simply the means to be used in accomplishing greater good.

Dr. Steele was a life member of the National Educational Association, having joined it, as such, in 1883. He was a loyal and earnest friend of its aims and purposes, and his genial fellowship will be greatly missed at its annual meetings.

ARIEL PARISH, A. M.

As from year to year we assemble, and greet with kindly interest those whom we have often met as friends and co-workers in a common cause,—our thoughts, very naturally, revert to the memory of those whom we have been wont to meet on like occasions, in former years, who have passed to that bourne whence none ever return. Death is ever busy, and sooner or later, calls for every human being. Of those who, in 1830, met in the city of Boston, to organize the first educational association, like this, not one survives. Though we shall never again meet them on earth, we are constantly reaping the fruits of their toil, for they *organized and vitalized agencies* which will prove a perpetuating and widening blessing through ages to come, and if we are wise in utilizing our enlarged opportunities and privileges, we shall greatly contribute to the *extension and value* of the work to which they, under less favoring circumstances, so largely contributed.

Since our last annual meeting one of our number, who for nearly three-score years had devoted himself to the work of education, and whose genial face for nearly a score of years we have been wont to see at our yearly meetings, has been called from earthly scenes, and henceforth will live only in the hearts and lives of the multitudes, who, by his influence and teachings, have been trained for life's duties,—and those with whom he was associated in the various walks and work of life. It rarely falls to the lot of any man to spend so many years in the continued and successful work of education, as fell to the lot of our late friend and brother,—Ariel Parish.

Mr. Parish was born at Coventry, Conn., on the 20th of July, 1808. His early, and preparatory, education was in the schools of Tolland and Ellington, and in the Lancasterian School of Mr. Lovell, in New Haven.

At the age of seventeen, while preparing for college, he commenced teaching in the town of Tolland and, subsequently taught in Ellington, Conn., and Springfield, Mass. In 1831 he entered Yale College from which he honorably graduated in 1835. After graduating he taught in Berlin and Fair Haven, Conn., for a season and in 1838 became preceptor of the academy in Westfield, Mass., a position he held for six years. In 1844, he was elected to the mastership of the High School in Springfield, Mass., where for twenty-one years he labored with great fidelity and success, and to very general acceptance. Under his instruction hundreds of youth, of both sexes, received that training and influence which qualified them for positions of usefulness and honor, and the lives of multitudes of these in various parts of our country bear ample testimony to the worth and fidelity of him under whom they were privileged to pass so many of their school days.

In 1865, Mr. Parish was elected Superintendent of the schools of New Haven, a position of great importance, which he held for sixteen years, during which he gained the confidence and esteem of the teachers and all who, in any way, were associated with him in the school work of the city and in the more general work of education throughout the state. He was for many years a member of this Association and ever ready to do what he could to promote its interests. In 1881, at the advanced age of 73, he retired from the position he had so long and so faithfully occupied in New Haven and on doing so he received a substantial token of the esteem in which he was held by the teachers of the city. Soon after resigning his charge he went to Colorado and died in the city of Denver, Nov. 24, 1885, at the age of seventy-seven years, four months and four days, "full of honors and full of years."

In addition to the work of teaching and supervising, Mr. Parish held various offices of honor and usefulness. He was for several years a member of the Massachusetts State Board of Education and for a time its chairman. He was a Trustee of Mt. Holyoke Female Seminary, and when the Massachusetts State Teachers' Association was organized, Mr. Parish took an active part in its work and from the first was a member of its official Board and in 1847 and '48 its President. He took a lively interest in the establishment of the *Massachusetts Teacher* and was for several years one of its Board of Editors. In Teachers' Institutes and other educational agencies he was deeply interested and as opportunity offered, he contributed what he could to promote their success and usefulness.

We find that for more than half a century our departed friend devoted his time and energies to the great work of education and participated largely in all the efforts made to elevate and improve the schools, and if the next fifty years shall witness as great and important advancement as

has been made in fifty years preceding, the next generation will enjoy privileges of a very high order.

In the death of Mr. Parish, the community lost a true Christian gentleman, and the cause of education one of its most consistent, faithful, and earnest advocates and helpers. Of him we may truly say that in every good way and work—"he did what he could" and though we shall never again behold his face on earth, the sweet influence of his long and useful life will abide and bear fruit.

F. R. FEITSHANS, M. A.

F. R. Feitshans was born in Pennsylvania in 1846. His parents were both natives of Germany. He graduated at the Pennsylvania College at Gettysburg, in 1869, with the degree of B. A., and three years later received the degree of M. A. He studied theology under Dr. Henry E. Jacobs, Professor of Latin Literature in Pennsylvania College, and completed the course, but did not enter the ministry. He taught country schools two years before graduating, and after leaving college taught one year in the Classical School at Rochester, Pa., as Professor of Mathematics. He went to Springfield, Ill., in 1870, and for three years had charge of St. Paul's College, the old Illinois State University. In 1872 he was elected to the chair of Mathematics in Wisconsin University. In 1873 he was elected to the chair of Greek in Carthage College; in 1874 he was elected Professor of English Literature in Thiel College, Pa., and in 1875 was tendered the principalship of the Newark Academy, Newark, N. J. All of these honors he declined, preferring the broad, untrammelled field of labor afforded in the public schools. In September, 1873, Mr. Feitshans entered the High School as Assistant Principal, was promoted to Principal the same year and held that position until 1881, when the School Board made him the Superintendent of the City schools of Springfield, Ill., which position he held to the day of his death. He and his wife and children attended the National Educational Association meeting at Topeka, Kansas, in July. He was in poor health at the time, but as one of the committee appointed to secure the next meeting at Springfield, labored indefatigably in that direction. His earnest efforts in that cause, it is believed, weakened a constitution already somewhat impaired, and rendered him unfit to grapple with that dread disease, typhoid fever, with which he died at Denver, Colorado, August 24, 1886. Mr. Feitshans was a plain, earnest, courteous gentleman, devoted to his home and friends, and a great favorite with the pupils with whom his life was spent. Being fully equipped for his life work, his whole soul was filled with the grand purpose to be useful in his chosen profession. He was an ardent advocate of public education, and loved the public school. He devoted himself unselfishly

to his profession, and by his strong, untiring efforts sought to elevate his fellow-workers, and stimulate them to emulate his example in the discharge of their duties as public educators. He had a broad and catholic knowledge of principles and methods, and was always suggestive and helpful in his relations to younger teachers, whom he encouraged by precept and example. Systematic in his habits and loving system, he never sacrificed the individuality of the teacher to the demands of system. His influence will be long felt in the schools of Springfield, and throughout the State of Illinois, and his image will remain in the hearts of the pupils and teachers as a lasting memorial of his fidelity to duty. As a citizen, he was intelligent, high-minded, estimable, discreet, and true to the relations of life. Although he died a few days after the meeting at Topeka, your committee have thought it wise to place upon record, this brief tribute to his memory.

PROCEEDINGS
OF THE
SIXTH ANNUAL MEETING
OF THE
National Council of Education.

REPORT OF SECRETARY.

TOPEKA, KANSAS, July 9, 1886.

Opening Session.

The National Council of Education met, pursuant to the call of President Daniel B. Hagar, at 10 o'clock A. M., in the Senate Chamber, and was opened with prayer by Right Rev. Thomas Vail, Bishop of Kansas.

Mr. D. C. Tillottson, Superintendent of the public schools of Topeka, extended to the Council a cordial welcome to the city, on behalf of the citizens of Kansas and of the city of Topeka, to which the President responded on behalf of the Council.

The Committee on "Elementary Education" then presented, through their chairman, Mr. Albert G. Boyden, of Massachusetts, a report on "Text-Books in Elementary Schools." Mr. Sheldon, of Boston, was requested by the President to report the discussion of this report, in which the following members participated, viz.: Messrs. Hancock, Boyden, Hailman, Hinsdale, Richards, Allyn, Coy, Brown, Gove, Fairchild, and Pickard.

After some amendments and verbal changes, it was ordered that the report be published in the proceedings of the Council.

Afternoon Session.

The Council was called to order by the President at 3 o'clock.

Mr. Sheldon read his report of the discussion of the report of the Committee on Elementary Education, which was ordered printed with the proceedings.

The treasurer, Mr. George P. Brown, then made a report of the financial condition of the Council, which was referred to an auditing committee consisting of Messrs. E. W. Coy, B. A. Hinsdale, and S. H. Peabody.

The following committees were appointed by the President:—

ON THE NOMINATION OF OFFICERS.—J. L. Pickard, E. C. Hewitt, George T. Fairchild, Robert Allyn, W. A. Mowry.

ON NOMINATION OF NEW MEMBERS.—Aaron Gove, W. N. Hailman, Zalmon Richards, H. S. Tarbell, W. E. Sheldon.

The Committee on "City School Systems" presented, through Mr. H. S. Jones, a report on "Pupils,—Classification, Examination and Promotion."

Mr. J. M. Greenwood was appointed to report the discussion, in which the following members participated, viz.: Messrs. Hancock, Peaslee, Hinsdale, Greenwood, Mowry, Peabody, Jones, Gove, Brown, Hagar, Tarbell, Coy, Andrews, Allyn, and Pickard.

On motion, it was ordered that the report of the committee be published in the proceedings of the Council.

The Council then adjourned until 9.30 to-morrow morning.

Members present during one or both sessions:—Messrs. Allyn, Andrews, Boyden, Brown, Chapin, Coy, Fairchild, Gove, Greenwood, Hagar, Hailman, Hancock, Hewett, Hinsdale, H. M. James, Jones, Mowry, Ordway, Peabody, Peaslee, Pickard, Richards, Sheldon, and Tarbell.

SECOND DAY.—JULY 10, 1886.

Morning Session.

The Council was called to order at 9.30 by the President. Mr. Allyn, of Illinois, opened the session with prayer.

After the reading and adoption of the minutes of the proceedings of yesterday, Mr. Greenwood read his report of the discussion of yesterday afternoon, which was ordered published in the proceedings.

An invitation from the chairman of the Reception Committee to a public reception in the Hall of Representatives was extended to the Council through Mr. Sheldon, which was accepted, and it was voted to return the thanks of the Council for the courtesy.

The committee appointed to audit the books of the Treasurer, made the following report, which was adopted:—

To the Council of Education:—

Your Auditing Committee beg leave to report that they have carefully examined the books of the Treasurer of the Council, and have found his accounts correct.

Respectfully submitted,

E. W. COY,
S. H. PEABODY, } *Auditing Committee.*
B. A. HINSDALE, }

July 10, 1886.

The Committee on "Higher Education" then presented, through their chairman, Mr. A. L. Chapin, a report on "The Higher Institutions Required."

Mr. Brown was appointed by the President to report the discussion.

On motion of Mr. Gove, it was ordered that this report be published in the proceedings of the Council, and that the Secretary be instructed to make the following entry in respect to all reports submitted to the Council, unless otherwise ordered; viz.: "It was ordered that the report be published in the proceedings of the Council."

The following members participated in the discussion of this report:—Messrs. Allyn, Andrews, Boyden, Brown, Chapin, Fairchild, Greenwood, Hancock, Hinsdale, Mowry, Ordway, and Tarbell.

Afternoon Session.

The Council was called to order by the President at 3 o'clock. The roll-call showed that twenty-seven members of the Council were present.

After the reading of Mr. Brown's report of the forenoon's discussion, the Committee on the "Education of Girls" made a report, through Mr. H. M. James, on "Technical Training for Girls."

Mr. Gove was appointed to report the discussion, in which the following members took part:—Messrs. Allyn, Boyden, Chapin, Coy, Fairchild, Gove, Greenwood, Hagar, Hancock, Hinsdale, H. M. James, Jones, Ordway, Pickard, Richards, Sheldon, and White.

The Council then adjourned to meet at 9.30, Monday morning.

The following members were present:—Messrs. Allyn, Andrews, Boyden, Brown, Calkins, Chapin, Coy, Fairchild, Gove, Greenwood, Hagar, Hailman, Hancock, Hewett, Hinsdale, H. M. James, Jones, Mowry, Ordway, Peabody, Peaslee, Pickard, Richards, Sheldon, Stevenson, Tarbell, and White.

THIRD DAY.—JULY 12, 1886.

Morning Session.

President Hagar called the Council to order promptly at 9.30, and President Chapin, of Wisconsin, opened the session with prayer.

The minutes of Saturday's proceedings were read and approved, and then followed the report of the discussion of the paper read by Mr. James on the "Higher Education of Girls," which was made by Mr. Gove.

It was ordered that this report be published with the proceedings.

The President informed the Council that he had received a paper prepared by Mr. W. H. Payne, of Michigan, who was a member of the Committee on "Pedagogics." This was a report on the "Function of the Public School." But neither the author of the paper nor any member of the committee was present, nor was there any evidence that this report had been approved by a majority of the committee. On motion, it was ordered that this paper be read at the morning session to-morrow.

The Committee on "Technical Education," through Mr. S. H. Peabody, of Illinois, then made a report on "The Pedagogical Value of the School Workshop." The report was followed by an animated discussion extending through both the morning and the afternoon session. Mr. Mowry was requested to report the discussion. It was ordered that the report be published in the proceedings of the Council.

The President appointed the following Committee on Resolutions, viz. : Messrs. E. E. White, J. M. Ordway and A. G. Boyden.

Afternoon Session.

The Council met at 3 o'clock and, after roll-call, proceeded with the discussion of the report on the "Pedagogical Value of the School Workshop." The following members took part in the discussion :— Messrs. Andrews, Brown, Chapin, Fairchild, Gove, Greenwood, Hancock, Hinsdale, H. M. James, Jones, Ordway, Peabody, Peaslee, Richards, and White.

A communication was received from Mr. George S. Chase, President of the Board of Education of Topeka, inviting the Council to a drive about the city, which was accepted and the thanks of the Council were returned.

On motion of Mr. Brown, it was ordered that the Council go into executive session for the transaction of business.

Executive Session.

The Council in executive session having been called to order, President Hagar called for the report of the committee on the nomination of officers. The following report was submitted :—

For President—Daniel B. Hagar, of Massachusetts.

For Vice-President—H. S. Jones, of Pennsylvania.

For Secretary and Treasurer—E. W. Coy, of Ohio.

For Executive Committee—A. G. Boyden, of Massachusetts; A. L. Chapin, of Wisconsin; B. A. Hinsdale, of Ohio; Delia L. Williams, of Ohio.

The report was adopted.

The committee to nominate persons for membership of the Council made the following recommendations:—

1. That the following members be placed in the honorary class, under the provisions of the Constitution in Article 1, Section V:—John W. Dickinson, Massachusetts; V. C. Dibble, South Carolina; G. J. Orr, Georgia; F. W. Parker, Illinois; W. W. Folwell, Minnesota.

2. That the following members, whose terms have expired, be elected their own successors for a term of six years:—John B. Peaslee, Ohio; W. H. Payne, Michigan; E. E. White, Ohio; B. A. Hinsdale, Ohio.

3. That William J. Corthell, of Maine, be elected a member of the Council for six years.

4. That Frank A. Fitzpatrick, of Kansas, be elected to the place made vacant by the transfer of John W. Dickinson to the honorary list, term expiring in 1887.

That Mary A. Nicholson, of Indiana, be elected to the place made vacant by the transfer of V. C. Dibble to the honorary list, term expiring in 1887.

That W. F. King, of Iowa, be elected to the place made vacant by the transfer of F. W. Parker to the honorary list, term expiring in 1889.

That James H. Baker, of Colorado, be elected to the place made vacant by the transfer of G. J. Orr to the honorary list, term expiring in 1888.

That John S. Irwin, of Indiana, be elected to the place made vacant by the transfer of W. W. Folwell to the honorary list, term expiring in 1890.

That John W. Dickinson, of Massachusetts, be transferred from the honorary to the active class, to fill the vacancy caused by the death of John D. Philbrick, term expiring in 1891.

The report of the committee was adopted.

On motion of Mr. Hancock, it was ordered that ten copies of the published proceedings be furnished each active member who pays the membership fee of \$3.00.

On motion of Mr. White, it was ordered that the President and

outgoing Secretary be a committee to publish the proceedings of the Council, and that 750 copies of the same be printed.

On motion, the Council adjourned to meet at 9.30 to-morrow morning.

The following members were present:—Messrs. Allyn, Andrews, Boyden, Brown, Calkins, Chapin, Coy, Fairchild, Gove, Greenwood, Hagar, Hailman, Hancock, Hewett, Hinsdale, James, Jones, Kiehle, Mowry, Ordway, Peabody, Peaslee, Pickard, Richards, Sheldon, Stearns, Stevenson, Tarbell, White, and Mrs. Williams.

. FOURTH DAY.—JULY 13, 1886.

Morning Session.

The Council convened at 9.30, with the President in the chair. Dr. Andrews opened the session with prayer.

After the reading and adoption of the minutes and the calling of the roll, Mr. Mowry read his report of the discussion on the "Educational Value of the School Workshop." This report was ordered to be published with the proceedings.

The paper sent by Mr. W. H. Payne, of the Committee on "Pedagogy," on "The Function of the American Public School," was read by Mr. W. E. Sheldon. The following members participated in the discussion:—Messrs. Andrews, Brown, Greenwood, Hailman, Hancock, Hinsdale, Jones, Kiehle, Stearns, and White.

It was ordered that this report be referred back to the committee for further consideration, and that no publication of it be made in the volume of proceedings.

Mr. J. L. Pickard, of Iowa, then read a tribute to the memory of Dr. John D. Philbrick, prepared by Mr. Larkin Dunton, of Massachusetts, which was ordered printed in the volume of proceedings.

The Committee on Resolutions offered the following, which was adopted:—

Resolved: That the thanks of the Council are hereby extended to its officers for the efficient and acceptable manner in which they have discharged their duties, and especially to President Hagar for the wise provision made for this meeting, and for the dignified and happy manner in which he has presided.

The Council then adjourned to meet at the call of the President.

GEO. P. BROWN, *Secretary.*

REPORTS OF COMMITTEES, AND DISCUSSIONS.

REPORT OF COMMITTEE ON ELEMENTARY EDUCATION.

TEXT-BOOKS IN ELEMENTARY SCHOOLS.

The subject has been considered under five heads.

The elementary school includes the grades preceding the high school.

1. THE ELEMENTARY SCHOOL AS A WHOLE.

The elementary school is a company of children gathered from many families and representing every variety of disposition and circumstance, who are to be trained together.

It is a large family of children who are to be guarded and guided with wisdom, prudence, and watchful care.

It is an organized society in which every member is, by constant and full employment, to seek his own good with a due regard for the rights and feelings of others; in which each child is affected on all sides of his nature by contact and competition with his fellows.

It is a place in which the principles of government are applied to maintain the rights and to enforce the performance of the duties of each one of its citizens.

The teacher is guide, guardian, exemplar, and ruler of the children, the constitutional head of this organization, combining all the functions of government in one person. The elementary school is the place for the school education of all the people. It is the ally of the family, the church, society, and the State.

2. WHAT THE NATURE OF THE CHILD REQUIRES.

Every child has a physical and a rational nature, a body and mind which must work together, and which must react upon each other.

He is self-active. He must think, feel, will, either to the upbuilding or to the degrading of himself. If left to himself, he will follow his own impulse in selfish gratification, to the neglect of his higher nature.

His nature can be satisfied only by the harmonious exertion of all his powers to the full measure of his ability.

All his powers must be repeatedly drawn forth into right activity, to the end that *habits* of right thinking, feeling, willing, shall be established. This implies the right training of the perceptive faculties, memory, imagination, and the reflective power; the proper control of the appetites, desires, and affections; choice and action in accordance with moral obligation.

The right training of all the powers requires that the proper objects of thought shall be brought distinctly before the mind of the child in the natural and logical order, from which he shall acquire ideas and make the correct expression of them; that the voluntary direction of attention by the child to the objects present shall be secured; that the mind shall act with all its might, as long as it can act without a forced activity; that the repetition of its action shall be continued until the idea, the expression, and the habit are fixed in the mind; that the training shall be adapted to the unfolding of the whole nature of the child; that those motives shall be awakened which will determine the child to do always what he ought to do; that the doing of what he ought to do shall be made more pleasurable than the omission of it. When this result is reached, the child is educated.

A person is educated when he is in that state in which he will make the best use of all his powers.

To educate a child is so to direct and control his activities through childhood and youth as to bring him into that state in which he will make the best use of all his powers. Education means training for life. Lives are to be dealt with; lessons are of value only so far as they minister to life.

3. THE END TO BE SOUGHT IN SCHOOL WORK.

Education implies instruction, which is, on the part of the child, a constant building in of power and knowledge in his mind by the repeated right exertion of all his powers; and on the part of the instructor, it is the intelligent direction and control of the activities of the child with a view to his education.

Instruction implies teaching, which is exciting right activity and knowledge in the mind of the learner.

Teaching implies a course of studies, which is a collection of objects of study arranged according to the order of the natural development of the mental powers, and the order of dependence of the different branches of knowledge.

The course of studies is the means to teaching. Teaching excites right activity and knowledge, and the continued repetition of this right activity in the acquisition and use of knowledge is the instruction which results in education.

The end to be sought in all the work of the elementary school is right mental training and knowledge for every child. By mental training is meant the unfolding of the whole nature, intellect, sensibility, will, and conscience. This implies right physical training. By knowledge is meant, primarily, knowledge at first hand, which is acquired from the object of thought.

4. THE MEANS FOR ITS ACCOMPLISHMENT.

The means by which this end is to be accomplished in the elementary school is the trained teacher, supported by intelligent and sympathetic supervision, teaching every child by means of the course of studies, training him to see distinctly, to use his hands intelligently, to hear accurately, to remember easily, to imagine vividly, to think logically, to speak correctly, to read and know the author, to write perspicuously, to feel, to act, for the highest and whole good of his nature.

The right activity of the child's mind should be the primary object of the teacher's thought. *The child* is to be taught. The object or subject upon which the child is working is only the means to exciting right activity and knowledge in his mind. This is the vital point in teaching. The teacher is constantly in danger of thinking so much about the object or subject as to forget the child.

In our public schools, children must be grouped in classes. The child must be taught as an individual, in a class, which is a part of the school. Hence there are four parties directly concerned in the teaching, namely; the teacher, the pupil, the class, the rest of the school. The teacher must have all these distinctly in view, and must conduct his teaching so as to keep each one in its proper relation to all the others.

5. THE TEXT-BOOK AND ITS PLACE IN THE WORK.

All ideas of material things and of the action of physical forces must be acquired, primarily, by attending to the impressions which

these material objects make upon the senses. All ideas of the operations of thinking, feeling, and willing, must be acquired, primarily, by attending to these operations, as the mind is conscious of them. Ideas as they are acquired from the object are associated with spoken and written words, which thus become the signs of ideas and the medium for the interchange of thought.

Language must keep step with the acquisitive power.

All thinking, in its stricter sense, is, primarily, the comparison of ideas which the mind has acquired from the object of thought. One's thinking is conditioned upon his own observation of material and mental objects. Observation, reflection, and expression must go hand in hand.

A book is a record of thoughts, from which the reader may acquire information to guide him in his own observation, thought, or action ; or from which he may acquire knowledge of the thoughts and language of others ; either or both of which may be to him a stimulus. A book, in giving the steps of an experiment, gives information to guide one in making the experiment. A book, like Bacon's "Essays," or Milton's "Paradise Lost," is the source of knowledge of the author's thought and language.

The value of the book in itself is proportional to the amount of truth which the record represents. Its value to the reader is proportional to his ability to interpret the record, and to use the information, knowledge, or stimulus which he obtains from it.

The ability to interpret the record is proportional to the reader's knowledge of the objects which the author describes, and to his knowledge of language. The reader must know the meaning of every word, or he cannot acquire the thought expressed by the writer. If new words appear in the book, they must be made intelligible by the use of words whose meaning is known to the reader, or by presenting the thing for which the word is the sign.

The book furnishes the reader with the new combinations of ideas in the thoughts of the writer ; the distinct idea of a strictly new object must be acquired from the object itself. The term "text-book" is used with much latitude of meaning ; as commonly applied, it means all books which are regularly used in class exercises, in distinction from books of reference and books for general reading.

Books for class exercises are of two kinds ; first, those which contain the statement of the subject matter as the text, with the explanation of the principles and processes as comments on the text.

These books are written and used with the view of having the child learn the words of the book and recite them to the teacher. This view makes the learning and reciting of words the beginning, middle, and end of elementary school work, with a certain per cent. of correct answers for a standard. In this procedure, there is no true teaching by the teacher, no proper development of the powers of the child, no acquisition of real knowledge. This class of books should have no place in elementary school work.

Teaching requires, *first*, the selection of the proper objects of thought for teaching, and their arrangement in the natural and logical order by the teacher, before he comes to the class.

Second, it requires that the teacher before the class shall bring the object of thought distinctly before the mind of the learner; that he shall skilfully direct his observation, thought, and expression; that he shall secure his voluntary direction of attention to the objects present, so that the learner shall acquire the idea of the object himself; that he shall make the correct expression of the ideas acquired orally and in writing; and that he shall make a recapitulation of what has been taught, that he may know the relation of the parts to one another and to the whole.

Third, it requires that there shall be thorough study by the learner of what has been taught in the class to make the thoughts his own for use, by association and repetition, after the order and method in which they were taught.

Fourth, it requires systematic and thorough examination of the learner upon what he has studied, to secure from him the proper study, comprehensive recapitulation and reviews, and applications to test the power and knowledge of the learner.

The objects of thought used in teaching are the *real object*, which is the material object in relation with the senses, or the mental object distinctly in consciousness; the *model*, which represents, in the solid, the form, color, size, and relative position of the parts of the object; the *picture*, which imperfectly represents on a surface the appearance of the object in position, form, color, and relative position of parts; the *diagram*, which represents on a surface the sectional view of the object; the *experiment*, which shows the action and effects of physical forces; *language*, as an object of thought, in the formation of words, in the construction of sentences, and in the choice and use of words; and the *book*, how to read and use books.

A well selected, well graded, full supply of these objects of thought is indispensable to good teaching.

Good books are an essential aid to good teaching. The proper kind of books for class exercises are those which contain the objects of study without the author's explanation of the thoughts: such as books of carefully selected sentences, and carefully written narratives and descriptions, to be used with the objects in teaching beginners to read; carefully selected and carefully written books to be used in teaching how to read an author; books of problems to be solved, of sentences to be translated and analyzed, carefully selected and graded; books of topics to direct the learner in his study of objects and in his experiments; books containing historical documents and records for the study of the past; and choice books on the various subjects of study, in which the best thoughts of the writer have been crystalized, showing what others have observed, imagined, thought, and done, which are to be read for the thoughts of the writer.

Teachers may secure such books, in addition to those provided by school authorities, by direct communication with publishers; by a judicious use of the public library; and by organizing, as some have done, reading circles, in connection with their own schools.

Books may take the place of the teacher, in part, when the pupil has learned how to read an author; but they should never be allowed to be a substitute for the object of study. The greatest error in the elementary school is the fact that pupils are allowed to learn words without ideas.

It will be seen, from this discussion, that the elementary school is an organization for training children in society; that the education of the child is the end to be sought in all its work; that the means by which this end is accomplished is the trained teacher, supported by wise supervision, using the course of studies as a means to exciting to right activity and knowledge; that mere lesson books and lesson hearing should have no place in school work; that those books which, like the living teacher, lead to the true objects of knowledge, are an essential help to good teaching in the elementary school.

ALBERT G. BOYDEN,

Chairman.

DISCUSSION OF THE COMMITTEE'S REPORT.

[REPORTED BY W. E. SHELDON, OF BOSTON.]

Mr. HANCOCK suggested that the chairman restate the four points discussed in the report, and that they be considered in order.

Mr. BOYDEN read the first point, in which he stated that the school was an organization like a republic, a family, a society, and an association, in which each child is affected on all sides of his nature by contact and competition with his fellows.

Mr. HAILMAN asked, Is the school a republic in all countries? How would it be in a monarchy?

Mr. BOYDEN recapitulated the points made in the report, stating the sense in which the elementary school was like a republic, a family, a society, and an association, for mutual helpfulness. The fundamental idea of the school is, that it trains for good government in a republic.

Mr. FAIRCHILD said that the language of the report on these points was figurative. The school is not really a republic, or a family, or a society, but an organization, of which the teacher is the ruling and directing power.

Mr. HINSDALE—The school may be democratic in its spirit, republican in its genius, but not in its origin and form; in form, a school in a monarchical country will not differ from a school in a democratic government; but it would naturally have less of the democratic spirit and tendency.

Mr. BROWN remarked that the school was an organization which had its own laws. The pupil does not unite with the teacher in determining these laws. The teacher alone determines them. If his rules are arbitrary and unjust, he may be removed by a revolution. The teacher is, in the main, an absolute monarch.

Mr. HANCOCK agreed that the office of the teacher was largely that of a monarchical ruler.

Mr. BROWN—The school is not even an incipient republic. It is from first to last an absolute monarchy.

Mr. COY said that the school was the place, in a republic, where the pupil was trained for the intelligent discharge of his duties as a citizen.

Mr. HAILMAN said all schools, in all countries, trained their youth for citizenship. It does not represent the object of the school correctly to say that pupils are trained for the state.

Mr. ALLYN suggested that if the figures of speech could be dropped from the report, in defining elementary education, it would be more clearly understood.

President HAGAR stated that it had been the custom of the Council to refer back to the committees such portions of reports for changes as might be suggested by the Council.

Mr. HAILMAN moved to refer back this portion of the report to the committee for verbal changes. The motion was passed.

Mr. PICKARD said, that so far as the teacher is concerned, he is an absolute monarch. The element of democracy comes in where the relations of the pupils with each other are considered.

Mr. ALLYN thought that the differences of opinion among the members of the Council, on this portion of the report, were mainly in regard to the use of language in it.

Mr. BOYDEN proceeded to restate the second part of the report.

Mr. RICHARDS asked what was meant by the phrase, "training for life."

Mr. BOYDEN—The training in this life is, of course, with a view to an "endless life."

Mr. HANCOCK inquired what was meant in the report by "knowledge at first hand."

Mr. BOYDEN said the primary object was to train children to observe and investigate for themselves,—to get mental training and acquire such information as was essential as a basis for future mental activity and growth in knowledge.

Mr. BROWN, speaking to the statement by Mr. Hinsdale, that it was proper to speak of knowledge knowing itself, said: "Knowing is a form of mind-activity of which one is conscious. We call it idea, or conception; which conception must be true to the reality existing, independent of the mind, to be knowledge. If not true to this reality, it may be belief or opinion, but it is not knowing. Knowledge, considered as a product, is simply the power or capability that the mind acquires by repetition of an act of knowing to perform that act again, at will or on slight suggestion. One's knowledge is much broader than the conscious knowing of any particular moment. Knowing is, then, the mind in a state of conscious intellectual activity. It is not an untrue conception, therefore, to think of knowledge knowing itself, though perhaps not the best form of statement. It is but saying that the mind is self-conscious in all of its states of intellectual activity."

Mr. HAILMAN suggested that the report be modified by closing the sentence on this second point, as follows: "Education means, *primarily*, training for life."

Mr. HINSDALE spoke on the definition of knowledge, and asked whether it was an act.

Mr. COY asked if knowledge was entirely subjective?

Mr. HANCOCK asked: What kind of knowledge is it that "knows itself"?

Mr. BOYDEN replied that the use of the word in the report referred to knowledge at first hand, as acquired from "the object of thought."

Mr. BROWN asked what the committee meant by knowledge at second hand.

Mr. BOYDEN replied that such knowledge comes to the mind of the child from outside sources.

Mr. HINSDALE said, "When a pupil comes for the first time to the school, he puts himself in a position to gain knowledge at second hand. The school, sooner or later, trains by the use of the book, by graphic illustration, etc., and by the exercise of the senses."

Mr. HANCOCK—"First hand" knowledge is very important, but mainly as a means of acquiring "second hand" knowledge.

Mr. BROWN—The amount of knowledge acquired at second hand largely exceeds that acquired at first hand.

Mr. BOYDEN reported back the following change in the report, which was accepted. "By knowledge is meant, primarily, knowledge at first hand, which is acquired from the object of thought," omitting the phrase, "not mere information."

On the last point of the report, Mr. Hancock saw no objection to the proper use of books, or even to the use of the exact language of a book. The question of vital importance is, of course, that the pupil should clearly understand the *thought*.

Mr. GOVE asked Mr. Hancock if he would advise using the exact language of an author?

Mr. HANCOCK replied, that the sublime thoughts of Emerson could only be properly expressed by the use of his own words.

Mr. BROWN could not go quite so far as the report. He thought that ideas and thoughts that were most worthy to be acquired by the pupil, must be, at first, but vaguely comprehended. When the child learns a form of statement which he only vaguely comprehends, he is impelled, if well taught, to seek to fill these comparatively empty forms and make them significant. The law of acquisition of knowledge is from the vague to the definite; but if no form of statement is learned, then there is nothing for the learner to come back to,—nothing to prompt to fuller and clearer knowledge. Pupils must learn the statement of many things they do not comprehend. The caution is, to avoid teaching such statements as are not accompanied with even *vague* knowledge of their significance.

Mr. HANCOCK thought pupils often came gradually into the light of truth expressed in words.

The proper use of books was discussed by Messrs. Gove, Coy, Hailman, Richards, and Brown.

Mr. RICHARDS asked if problems in arithmetic should be first given to young children in the primary schools.

Mr. BOYDEN — Certainly.

Mr. PICKARD — When should children first be allowed to use books ?

Mr. BOYDEN — Books should be used in the first year of the pupil's life,—as soon as he acquires the power to use the book properly.

II.—REPORT OF THE COMMITTEE ON CITY SCHOOL SYSTEMS.

PUPILS,—CLASSIFICATION, EXAMINATION, AND PROMOTION.

[Presented by H. S. Jones.]

The topic—"Pupils,—Classification, Examination, and Promotion"—is the central and vital one of the schedule list outlined under the head of "City School Systems."

It concerns the material upon which the school works:—the building of brains. The ruler of the individual and the world is brains; and the problem which educators are called upon to solve is, how to build the best brains out of the material placed in their hands.

It is said that outsiders often see deeper into a game than those who take part in it. Strong cultured minds, rich in observation and power of critical discrimination, not engaged in educational work, have expressed themselves as seeing tendencies and results in public school systems that are far from being truly educative.

Sometimes the criticisms are pronounced in mild form, but often they are so positive as not easily to be misunderstood, and take the shape of charges. Some of the most emphatic are: "The system magnifies the importance of the routine operations of the school." "It mistakes means for ends." "It is absorbed in non-essentials." "It insists too rigidly upon uniformity in methods and results." "It treats pupils *en masse*, and ignores individuality."

The educator has no higher duty than that which directs him to scan, measure, and weigh the tendencies of the system he is administering; and he should have an open ear to all cries, whether disparaging or encouraging, and should rejoice in the helpful observations and candid criticisms of non-experts.

I. Purpose of the Common School.

It is not the purpose of the common school to serve as a human sifting-machine, by which a certain kind of brain can be discovered and retained.

The common school is an institution that is to receive and hold as long as possible, children differing more or less widely in race, heredity, surroundings, strength, health, and the faculty of learning.

The school of the people should be organized and managed no more for the talented and the evenly-balanced of fair ability in many directions, than for the weak, the crippled, and those whose brains possess considerable vigor, but are unmistakably lop-sided.

II. Classification.

The day is not far distant when classification, even in large schools, was hardly known. Individual study and individual instruction held sway.

The classification that existed was of the most elastic type; a pupil joined a class or not, according to his liking; or drifted in and out; to-day a member—to-morrow, absent, absorbed in some independent work that held him prisoner.

This "go as you please" style of school, this total lack of system, in which the teacher guided and ruled so little and so loosely, is in marked contrast with the "model school" of later days, strong in systematic details, and in that close classification which does not allow a pupil to move, unless "under orders."

The old-time school with next to no organization, may be put down as a miserable failure—a factory of wasted efforts; but, nevertheless, it produced educational fruit of which we have no just reason to be ashamed.

The older we grow, the more easy we find it to respect methods and notions that once we stood ready to condemn or to laugh at.

The classification of a school is the placing of its pupils in sections or grades in accord with the course of study, based on the capacity of the pupils to do fairly the work of the grade to which they are assigned.

III. Benefits of Classification.

1. Classification in the management of schools possesses the valuable merit of economy. It sprang from the constantly recurring problem in industrial pursuits—How to make labor as productive as possible.

In gaining an elementary knowledge of conventional facts, such as signs—written and spoken—word-forms, arbitrary tables, dates, processes, second-hand knowledge, etc., a large number of pupils can be instructed by a single teacher, quite as well, if not better, as one or a very few.

As the sort of learning referred to must necessarily consume a large part of the time devoted to the education of the young, classification, if used judiciously, is unquestionably economical.

2. It serves as a healthful, social, and intellectual stimulus, softening and cheering such as are suffering from isolation in its various forms, strengthening and refining the social faculties, developing a spirit of friendly co-operation and arousing and quickening the listless and lethargic.

3. It encourages true emulation—the ambition to do what our leaders do—and to do it as well. Emulation, although easily transformed into the anti-social feelings—rivalry, envy, and hatred—is an educational instrument far too powerful and beneficial to be dispensed with.

IV. Classification, Close or Educational.

Classification may be said to be close or educational.

Close classification is military in spirit; it links pupil to pupil by an inelastic chain, and “keeping step” is the chief business when the command, “Forward, march,” is given. Its aim is fusion and uniformity.

It tempts the weaker teacher to the worship of such technicalities as are easily worked up into “splendid class recitations.” It places in the back-ground true teaching, and brings to the forefront chatty class lecturing.

The instruction given takes one of two forms—it adapts itself to the weak minority so as to hold the class together in funereal step, or it takes pride in “double-quick” thoroughness and burdensome exactions that can be borne only by the few.

The first is best illustrated in the workings of the Board Schools of England, where size of salary depends considerably on the number of pupils passed by the inspector. It is not an uncommon sight in that country to see a large majority of a class like overflowing pitchers at a fountain, while the teacher is struggling to adapt his instruction to the small mental throats of the laggards.

The latter is shown in strong light in a recent report of a metropolitan school of 1141 students, which dwindled down to 717 in five months, and to 652 at the end of the school year—a shrinkage of over 57 per cent. Ten hundred and forty-eight knocked at the door for admission, and 40 per cent. were rejected; and judging from the past, the 60 per cent. admitted will, in a few short months, be cut down 50 per cent.

Such management distinguishes the “survival of the fittest.” Material that will not fuse to the exact form desired, is rejected as slag.

In the Report, the Board of Education are congratulated on the “general prosperity” of the school.

It is proper to observe that close classification, in its best and worst forms, is hardly an evolution of the public school system. It is an attractive exotic, largely modified by different educational climates, originally imported from those higher and peculiarly distinctive institutions whose function is to act on the homogeneous few and not on the heterogeneous many.

Educational Classification.

Educational classification aims at the progress of the individual. It makes the class an economic convenience, rather than a necessity. When the pupil steps out of the broad domain of the conventional, to that which calls for experience and thought, it not only allows, but it compels, him to "break ranks." It makes no special effort to clothe each member in educational uniform. Class standing is an incident—not a standard or measure of the progress made, or the good received.

It demands that the teacher shall study the child before settling on methods and lessons—not the typical child, but the child sitting in his schoolroom.

The proper classification of pupils should receive the most careful attention of the supervisory force, and should never be left to the inexperienced, or to those who have difficulty in estimating mental faculty.

The size of a class and the number of classes to a teacher depend on material and location. A large class possessing many points of similarity is not so heavy a strain upon the teacher as a small one that has few or next to none.

Board rules that fix the minimum number of pupils to be assigned to a teacher are unpedagogical. This matter should be left entirely in the hands of those who know the children best.

Close classification finds an ally in mechanical methods, and where such methods prevail, it perfects the mechanism, to have all the pupils in the room in the same class. Under exceptional circumstances, this would be allowable, but with the average run of schools and pupils, two classes, at least, should be given to a teacher, and in case of the school of suburban make-up, the number may be increased to four, rather than have young children walk themselves weary, and into a dislike for education, by a daily struggle to reach a central school miles away.

V. Examination.

The examination of pupils should be subordinate to education,

serving merely as a factor in the operations of instruction. The idea that examination is education should have no place in the minds of pupils or teachers.

If otherwise, the teacher and those in his care will concentrate their energies upon gaining results that can be readily estimated by examinations. There is a radical difference between studying a subject for examination and studying it for possession.

Where examination is supreme in a school, the atmosphere is one of narrow criticism instead of enthusiastic learning. "Probable questions," like tormenting ghosts, haunt pupil and teacher, night and day, driving them with the cruel whip of per cents., into the kingdom of nervous restlessness and worry.

The kind of classification in force has much to do with the character of the examination.

Close, narrow classification moves in company with a corresponding examination.

Educational classification is satisfied with educational examination.

The "no examination" advocates ask, "Why use an appliance that can easily be made mischievous?" The answer is, that the value of an instrument is not lowered in the least by the fact that, unless skilfully handled, it may do harm.

It is conceded that where the life and strength of a school are given to preparing for examinations, the tendency of the examination is to crush out spontaneity in pupil and teacher, and that although examination is of service as a criterion, its truer and higher function is to stimulate.

Examinations should be (a) written, (b) oral, and (c) objective.

Since writing has entered so extensively into school exercises, examinations have largely taken the written form.

When the written examination cyclone struck Boston, over forty years ago, and the numbers of wounded and killed were presented in complicated per cent. tables for the inspection of the public, Horace Mann, in discussing the mortifying results, grew eloquent in praise of what he termed "the novel mode," and "the new method." To him, it seemed to meet every want, real and imaginary. In fact it seemed to him "a new education."

Without question, in some essential points, the written method stands preeminent; but it does not compass the whole circle of requirements.

Vocal expression has a place in our schools, and only by oral tests

can it be seen what readiness classes have in describing, reproducing, and conversing. Beside, the spoken word is a better test of assimilation than the written word. An English authority, speaking of the *viva voce* method, says, "Nothing so much defeats cram."

But the oral with the written method is only made completely effective by the addition of the objective. Since words and things have been joined in educational wedlock, in the teaching of the sciences, and sweet mother Nature visits occasionally the primary school, with the cheering promise that she will soon be around to stay, objects in examinations must soon take an honored seat.

Roughly speaking, examinations may serve (1) as approximative tests of class progress; (2) to bring to the front defects and oversights in the instruction; (3) to test exceptionally strong pupils recommended for individual promotion; (4) to determine whether a class, or most of it, are prepared or not for the work of the next higher grade; (5) to ascertain the fitness of a class to graduate from a course of study calling for a diploma.

As to who should take part in the several examinations outlined, the first is in the province of the class instructor. Nothing is better for a school and its teacher than to have the pupils occasionally take an educational stroll, without being led, inspired, or directed. Young people delight in showing their individual, unaided power.

The second should be under the control of the principal, or the supervisory force. The object being to correct the pedagogical vision of the teacher.

The third, which concerns individual promotions, may be conducted by the principal and the teacher of the grade to which the pupil is recommended for promotion, under supervisory direction.

The fourth, which relates to class promotions, should be in the hands of the principal, under proper supervision, the class teacher co-operating.

The fifth, which takes in the highest department of a system of schools, should be controlled by the teachers of the department, assisted, as far as practicable, by the superintendent. No outside, scholarly non-expert should be allowed to have a meddling hand in the business.

"Standing in examination" should never be used as a lever of disparagement. The child at the foot of the class may be the most deserving as a learner, though ranking low in power to receive and give back.

Nothing known to man is more sensitive than the human brain, and as the examination deals with impressible immaturity, everything depressing, exciting, or startling, should be barred out. It should be entered into by all concerned as pleasantly and as sympathetically as any other school duty that is the source of happiness and mental growth.

Questions and Time.

A word as to questions and time.

To question well is a fine art, and whether the questions are oral or written, they should have the foundation of preparation, and be so framed as to make the chief purpose of the examination to assist in education. They should be liberal in extent, shading from the very easy to the difficult, giving full opportunity to the several degrees of talent in the class.

The time should not be so limited as to cause a feeling of hurry. Some good minds when pressed for time become paralyzed; and if the time is short, "the single spirt people," those who have no disposition to revise and polish, outrank their betters.

V. Promotions.

Promotions have been referred to incidentally in what was presented under classification and examination. Individual and class promotions should not be determined by examination alone; the school history of the candidate should come in, and the guiding question should be, is he capable of taking the higher stage with profit to himself?

The act of promotion should not be magnified into an epoch.

As to frequency of promotions, the plan which embraces considerable flexibility seems best. Semi-annual promotions, especially in the lower grades, make it possible to adjust the classification during the school year, while yearly promotions tend to block the primaries and open no door of relief in line of readjustment.

DISCUSSION OF THE REPORT OF THE COMMITTEE.

[REPORTED BY J. M. GREENWOOD, OF KANSAS CITY.]

MR. HANCOCK—What is meant by "close classification," as employed by the committee in their report?

MR. HINSDALE was also in search of additional information upon this topic, to which the chairman of the committee replied by referring to the system of grading and promoting adopted at West Point.

MR. GOVE stated that the difference between West Point and the one employed in graded schools is, that only "picked material" can enter the Military Academy and remain there, while the common schools are for all, and hence are based upon a system of classification for all.

MR. HINSDALE wanted to know under what conditions classification is regarded as an economic or labor-saving invention.

MR. MOWEY held that the teacher should never lose sight of the pupils as individuals composing the class. The tendency is to treat the pupils in mass, to speak of them in mass, and to ignore and to crush out individuality. The true basis is the pupil, and not the collective unity. Let the teacher keep this point in view, "What is best for the pupil?"

MR. HANCOCK, while not objecting seriously to the expressions "close classification" and "loose classification," would recommend *mechanical* as a substitute for *close*.

MR. GOVE held that mass teaching in fact could not exist in any well-conducted modern school. That even the general questions reached pupils individually as well as the class collectively.

MR. ANDREWS believed that the impression intended to be conveyed in the report was to draw a close distinction between "massed teaching" and "individual teaching," and for the teachers to avoid the error of the former.

MR. HINSDALE agreed in the main with Mr. Mowry; yet he had observed a tendency occasionally among teachers to throw out or put back slow pupils. Furthermore, he believed the true theory to be this: to break up the grade as speedily as possible after the school commences,—that is, some to go forward, the main class to move onward, while the slow ones would drop back.

MR. HAILMAN asked for the central or subjective idea in the classification of pupils, and whether the pupils should be adapted to the course of study, or the course of study to the capacity of the pupils.

MR. SHELDON explained the process of classification in the large city schools of the East. He favored some system that would recognize the individual ability of each pupil to promotion and advancement. There is a great responsibility resting upon school superintendents. They demand too close attention to class work.

MR. PICKARD would advocate two kinds of classification,—*"a fixed classification"* and *"a mobile classification."*

MR. ALLYN suggested that the committee make definitions of the terms "close" and "educational" as applied to classification, as these words appear to be the ones about which the members differ or question.

MR. MOWEY illustrated "Father Burroughs" arrangement of classes as conducted in Lancaster, Pa. Three classes were assembled in one room under their teachers, with two recitation-rooms. Two classes recited in the two recitation-rooms, while the third class studied in the main room, being aided in their study by the teacher. At the close of the recitation, the classes changed, one of the others now taking the main room for study. Dr. Burroughs' idea was that school work was comprehended under three departments: 1. Study (by the pupils); 2. Teaching (by the teacher); 3. Examining (also by teacher).

MR. HANCOCK asked, Why have examinations at all? This query did not settle the question, but he would allow the examinations to count for one-half in promotions, and the other work to count for as much.

MR. PEASLEE would not mark per cents on United States history. As he understood it, history as a school subject is to arouse an interest in the pupil's mind for that character of literature. Let the taste be created, as it were, then guided and

directed. Pupils should be encouraged to read biographies in connection with their historical reading.

MR. RICHARDS wished to offset some "executive remarks," made by Mr. Brown. He did so by referring to an examination passed by a young man for a public position. After passing the examination in a highly satisfactory manner, he lacked executive ability.

REPORT OF COMMITTEE ON HIGHER EDUCATION.

HIGHER INSTITUTIONS REQUIRED.

According to the division of departments adopted by this Council, we understand "the Higher Education" to mean that part of our educational work which has to do with bringing forward, fit for active service, those who may be properly called, in Chinese phrase, "*superior men*"—men prepared to be leaders of thought and influence and authority and bold enterprise for the advancement of mankind and the general welfare of society. Its formal processes begin with a young man when he enters college, and terminate when he goes out from under teachers, to show, in his own individuality and action, what he has come to be and to possess.

It will help us to apprehend the institutions required, if we consider briefly, in the outset, what are the *direct aims* of the Higher Education. The education which comes before it is devoted to germinating processes for unfolding the faculties of the soul and starting them in active, systematic exercise. The Higher Education takes up the work thus begun and carries it forward for the maturing and expanding of minds to the highest degree practicable. Its aim, controlling at first, prominent through all its stages and methods, is *discipline*—the training which brings out every faculty in full strength, which removes excrescences, fills out deficiencies and brings forward in symmetrical development, minds well balanced in all parts, and prepared to enter efficiently upon any line of life-work.

It aims, also, to give *expansion* to the mind. It opens the wide world of truth, and calls the student to a comprehensive survey of the range of things that may be studied, introduces him to a close acquaintance with specific departments of truth, and initiates him into the methods and processes pertaining to each, so that if, for his life-work, he shall devote himself to one line of investigation, he may prosecute that with due recognition of the relations and claims of other departments. This warrants us to call it a *liberal* education.

Another aim of the higher education is *the accumulation of knowledge*,

for the mind itself to feed on, and for use in contact with other minds. While it favors a general knowledge of many things, it insists on an accurate knowledge of some things, leaving each student free to follow the prompting of his own taste and disposition, and to adapt his work to his circumstances and plans for life. A liberal education thus implies a broad culture, rich stores of knowledge, a general apprehension of things that may be known and a well-defined consciousness of some things thoroughly known.

Above and through all, the higher education aims to secure influences positive and direct on *the forming of character*. For the development of the whole man, intellectual and moral culture must be blended. The period of life when, with most persons, character is determined, is from the age of eighteen to twenty-five. The most effective work of the higher education comes within the same period, and the moral bearing of that work should be carefully and constantly regarded. This aim will be accomplished not so much by direct precepts and prohibitions, as by sentiments favorable to the things which are true and pure and just and honorable, made prevalent by the example and spirit of teachers, and by plain appeals to the reason and conscience of each soul, free and responsible for its own conduct.

The outcome of the work prosecuted with these aims will appear in *the perfecting of the individual soul*. To bring out the noblest faculties of the man in completest unfolding, to give to each, conscious possession and command of his own powers for any use, and to mold the spirit so that truth and purity and righteousness, love to God and love to men shall rule the life and shine out as the charm and glory of complete manhood,—to do this for each one and for as many as possible—this is the ultimate result, the final cause of the higher education. Society exists for the advancement of the individual and not the individual for society. Education, as the instrument of society, is accordingly directed to the perfecting of individuals. Every stage in the process must be made to contribute to this result, so far as the time, the appliances, and the quality of the subject will permit.

At the same time, we have to recognize the fact that no man liveth to himself alone. Those for whose individual development education has done its best, are to live in association with their fellows. In society they are to exemplify and illustrate the benefits they have received. Society is to feel their presence. By a law as fixed and constant as that which sends the sun's light and heat to affect all

life on our globe, the influence of those most highly educated is made to pervade all social life. The souls of all are quickened, raised, refined, thereby. So in this aspect of the matter, the results of the higher education appear in formers and reformers of society,—leaders in the world's civilization.

To speak more in detail, it sends forth broad-minded, energetic men to direct the great enterprises by which material blessings are multiplied and distributed; it prepares women to be good wives and mothers, and, at the same time, centres of light, queens in happy homes, ruling by the divine right of intelligence and love; it raises up capable teachers of all grades, such as are needed at the desk of the primary school and in the chair of the college professor; it gives the necessary outfit for the physician, the lawyer, the minister of religion and the high-minded journalist. Its results appear also in scholars, artists, authors, poets, investigators, and specialists in science, whose busy brain-work prepares and disseminates truth in forms fitted to be food for human souls, gratifies refined tastes, and draws out of nature's hidden sources new treasures to increase the sum of human knowledge and the means of human happiness.

We come now to the main question, What are the institutions required to carry on the higher education with such aims, for such results? It seems to us the two names, the College and the University, embrace all. Both these names have been sadly abused, being very frequently adopted by pretentious institutions, of all grades, from the common school upwards. Let us try to bring out a distinct view of the proper place and functions of each.

The American college is an institution *sui generis*. The name was introduced from old England, but the institution to which it is applied was conceived and has been unfolded to meet the peculiar exigencies of this new world. The records of New England inform us that as early as the year 1636, "the Lord was pleased to direct the hearts of the magistrates to think of erecting a school or college, and that speedily to be a *nursery of knowledge* in these deserts and *supply for posterity*." The college realizes this thought as it cherishes a love of knowledge and promotes its increase and trains and fits men for service in the State and in the Church and in all posts of influence where educated mind has power. Upon beginnings of education, made in the common schools, it rises to a higher plane, and while adding continually to the stores of knowledge, directs its chief efforts to that *training* of minds somewhat matured, which secures to

each, *self-knowledge*,—*self-possession* in the full command of all the mental faculties,—*breadth of view* respecting the range of truth, its departments and applications,—and a *moral and religious character*, based on love of truth for its own sake and prompting an unselfish devotion of all powers and all acquisitions to the good of men and the glory of God.

Under this leading idea, we need to notice a few things peculiar in the organization and routine of the college. Waiving now the question of the co-education of the sexes, we speak of a college as an institution for young men, believing our leading thoughts to be applicable as well to the higher education of young women, whether that be prosecuted in an institution which admits both sexes, or in one exclusively for women, properly called a college.

1. The college is peculiar in respect of *the persons* with whom it deals. They are young men, somewhere between the ages of fifteen and twenty-five—the best years are from eighteen to twenty-two. Then the capacities of the soul are well awake and are under the control of the possessor's will-power. Under special preparation they have gained some knowledge and some relish for learning. Yet they are flexible, impressible, ductile, just in a condition to be most effectively molded by wise training.

2. The college is peculiar as respects the *length of time* covered by its course of study. This has been fixed at just four years, not by any arbitrary enactment, but as experience has proved that this measure of time secures best results of the training contemplated. If the period is curtailed, something will be wanting. If it is prolonged, it must involve some retrenchment on either the preliminary preparatory culture, or on the subsequent university or professional study. On this point, Matthew Arnold well says, "The total cultivation of the man is the great matter, and this is why the term of years is prescribed, that the study may not degenerate into a preparation for the examinations; that the student may have the requisite time to come steadily and without over-hurrying to the fulness of the measure of his powers and his character; that he may be securely, thoroughly formed, instead of being bewildered and oppressed by a mass of information hastily heaped together."

3. Another peculiar feature of the college is *the prescribed curriculum of study*, enforced in great part by *daily recitations*. We need not enter here on the vexed question, how far the student should be allowed to select his studies. We may readily admit that

amid the multiplicity of subjects now claiming attention, there are place and need of discrimination and selection with reference to diverse tastes, capacities and aims. But we must also insist that with each student, the options shall be authoritatively adjusted to some system with respect to that training which is the main feature of college work, and that the test of recitations and laboratory work shall be all along applied. This is essential to form the habit of strict fidelity to duty. Only as the youth learns, at that stage of life, to follow the direction of superior wisdom and to bow to legitimate authority, can he ripen a manhood endowed with wisdom and worthy to be invested with authority to control others and to wield the highest power of influence. The college curriculum is greatly changed in its details, yet the great departments and the proportions between them differ little now from what they were a century ago. It is still Latin, Greek, or a modern language, and mathematics, to reveal and exercise the mind's powers in divers kinds of analysis and synthesis; physics and science, history and philosophy, to train the faculties in observation, judgment, and reasoning, and to bring to view the boundless value of knowledge open to explorers; and logic, rhetoric, and belles lettres, to cultivate the qualities of force, clearness, and beauty in the expression of thought.

The full time and the prescribed curriculum together bring this incidental advantage, that the student has opportunity for a *voluntary culture* of things not included in the regular routine, such as physical development by athletic sports, music and fine art and literary exercises, which bring students, in associations of their own, into competition with each other, like those of the real world. The best benefit comes from the intermingling of these duties incidental and self-assumed, with regular, required work. Its good fruits run through the whole subsequent life. What rich contributions of refined thought and practical invention the world has received from the incidental activities of busy men in what they called their odd hours or minutes of leisure or recreation!

4. Another peculiarity of the college, as founded and sustained by private, voluntary benefactions, is the presence through all its discipline of *positive moral and religious influences*. Its regimen enforces the rules of morality and provides for the participation of the student community, as such, in Christian worship. Its instruction and discipline are mainly in the hands of Christian men, who are sustained in their patient, toilsome, and trying work by the spirit of

Christian self-sacrifice and devotion. At the forming period of life, there is nothing so effective as the steady inflow of Christian truth and morality, to settle character and give it stability and breadth and tone; and the problem of life is unsolved, unless we admit the fact that "*moral and religious perfection* is the final aim of all human culture, as it is of our existence and discipline in the human condition."

Such in outline is the ideal college. Its chief object, the training of the mind, may be accomplished by several courses, differing from each other in the place given to particular branches of study. The important consideration respects the period of time occupied and a combination of studies in a prescribed course, such as will develop the various faculties of the soul in balanced proportion, under thorough discipline. It is a lamentable fact that in many of our colleges, the so-called "Scientific Course" means a shorter, easier, and less thorough course of study, the result of which is a partial, one-sided development, not worthy to be called a well-rounded liberal education. The different courses should be so adjusted as to be equivalent in respect of breadth of culture and full disciplinary exercise of all the faculties of the mind.

Necessity compels most of our Western colleges to have annexed to them, in some form, preparatory schools, on account of the lack of proper academies and the failure of our high schools to fit young men to enter proper collegiate courses of instruction. In itself, this necessity is to be regretted. It would be better that the college should stand out in its distinctive character for its peculiar work; yet the successful prosecution of that work depends on bringing classes to start evenly with a certain measure of previous culture and attainment. Certain requisites for admission to college must therefore be defined and maintained. The college can best maintain its standard of scholarship at the beginning and throughout its courses by having control, to a considerable extent, of the preparatory work. There is also an incidental advantage in bringing young men, at an early stage, within the atmosphere of the college, and giving members of the college Faculty opportunity to direct the starting of the minds which are afterwards to come more directly and constantly under their tuition. It is important, however, that the true sphere of the higher education should be clearly indicated by a well-defined line of demarkation between the preparatory school and the college. The earlier stage needs a different regimen and

somewhat different methods of instruction from those which best serve the later stage.

We pass now to speak of the university, which represents the other department of the higher education. If we look at the many and very diverse institutions to which this term is applied in our country, we must think that to most minds the word has no distinctive meaning. Its misuse has been, no doubt, encouraged by the fact that most of our best universities have been largely occupied with the work which belongs to colleges and academies. Harvard College and Yale College have, by processes of gradual evolution, grown into Harvard University and Yale University, their college organization being all the time, the nucleus of the whole and the center of their most careful attention and their most beneficial service. Michigan University, Wisconsin University, and Iowa University, have, through all their history thus far, been much engaged in what is proper college or academy work, the tendency being all the time, however, to eliminate the lower grades of education. Cornell University, in New York, proclaims as its great aim, to furnish facilities for any student to pursue whatever studies he may desire. Perhaps this blending of things that differ was necessitated by circumstances connected with the founding and the growth of these institutions, and we have no just occasion to complain of it. Yet it does seem important that, if the functions of two grades of institutions are to be united in one establishment, the line should be distinctly drawn between them, in respect of the regimen of students, the style and standard of scholarship, and the honors awarded.

A university proper, according to our view, should embrace a cluster of institutions or departments, designed, upon the foundation laid by previous courses of education, to give the special instruction which may prepare men to enter upon their chosen professions and furnish special facilities for that continued investigation and study by which the sum of human knowledge is increased. Here belong normal schools which are strictly such, the schools of technology and agriculture, the professional schools of law, medicine, and theology, schools of fine art and laboratories and lectureships for the advancement of particular branches of literature and science. One of our eminent educators has well marked the distinction between the college and the university thus: "The college is a *training-place* for minds that are yet immature, in the elements of knowledge and culture. The university is a *teaching-place* for those who are sup-

posed to have been trained to the capacities and responsibilities of incipient manhood." The strict regimen of the college ought not to be needed in the university. The freedom of the university is not suited to the needs of college students. In the university, instruction is given mostly by lectures, which simply impart knowledge and suggest to students lines for private investigation. The teachers must be masters in their respective departments. The range of subjects may be as wide as the whole realm of truth and the objects distinctly contemplated will be both the increase of knowledge and its dissemination, and its application, in every way possible, for the blessing of mankind.

Among the institutions already established in our country, the Johns Hopkins University, as far as its departments and courses are developed, comes nearest to our ideal of a university simple and true to the one end aimed at. Other institutions are doing, by their post-graduate courses, and professional schools and chairs of specific instruction, some good university work. The facilities for that part of the higher education in our land are being rapidly multiplied and improved, so that there is little necessity now for sending young men abroad to find opportunities for advancing themselves in particular lines of study. At the same time, we recognize a real benefit from extended travel, in the expansion of the mind and in association with old-world scenes, in which so much of history has been made and so much of science and philosophy have been developed.

So, in outline, we indicate the higher institutions required for carrying on the higher education to best results. The college, from its nature and true functions, holds the central position of effective influence. It is the goal of the earlier and lower stages of education. It is the point of departure for that growth in knowledge and wisdom which is the final preparation for leadership among men. We may not say that only college-educated men are fit to be lawyers, physicians, preachers, teachers, journalists, etc.; but we may say with truth, that the character and tone of these professions respectively are determined by the proportion of college-trained men who fill their ranks. And we may say, too, that for the common welfare, there is needed in all the professions, in the sphere of political life, in the range of scientific inquiry, in connection with our great manufacturing and mercantile enterprises, a larger infusion of thorough, intellectual, and moral training.

A. L. CHAPIN, *Chairman.*

REPORT OF THE DISCUSSION ON HIGHER INSTITUTIONS REQUIRED.

[MADE BY GEO. P. BROWN, OF CHICAGO.]

MR. FAIRCHILD asked what was meant by the relegation of agricultural or other schools of technology to the university.

MR. CHAPIN announced that technical instruction should be pursued after training in college.

MR. HANCOCK—Are there no normal schools?

MR. CHAPIN—Not strictly speaking. They are, more properly speaking, academies, with the addition of some technical training.

MR. HANCOCK—The evil in our institutions is, that every technical school does too much academic work; the technical instruction is simply an annex to the academy.

MR. FAIRCHILD—"How can the agricultural students be made to desire college training?" is the great question. Most of our professional men are made out of uneducated men. The same is true in agriculture.

MR. CHAPIN—Those pursuing agriculture ought to be led to see the value of preliminary general educational training as preparation for special education in agriculture.

MR. FAIRCHILD—One and one-half per cent. of the graduates of colleges east and west have come to farming sometime in their lives. I should just as strongly combat the idea that the work of the agricultural college should be purely or chiefly technical, as I do the one that no work is needed in preparing students with the thought of agriculture and other industries, as worthy of educated men.

MR. HANCOCK—Why say that college ignores agriculture more than medicine or other vocations?

MR. FAIRCHILD said that the college had been founded and run on the idea of law, medicine, or ministry, as the pursuit of its graduates; that this purpose gave tone to the college work.

MR. HINSDALE—I suppose the time is now come when the special institutions lately organized should have a tone decidedly different from the old institutions.

MR. FAIRCHILD—They are decidedly different in tone. I would not employ a professor from a purely literary school who had fixed habits of instruction. The tone of thought is different. There is a difference in the aim, and therefore a difference in the results.

MR. CHAPIN stated a case. One of the graduates of his college, who was a professor in a college, has now two leading Norwegian papers in Chicago. The subscribers are farmers. He set to work to do what he could for farmers. He prepared a book, compiled from the best agricultural literature, and is lifting his people. Due to Beloit College.

MR. ORDWAY—We have begun special instruction too soon. Congress commenced too soon. No one is prepared to go to these schools. We must lead the people to see the necessity of preliminary preparations. The college does not give the student any particular bent. The professional schools will have to continue for a time to give a general education.

MR. BOYDEN—The normal school has its distinctive work,—the education of teachers. There are a few normal schools in the country, and what few there are ought to be encouraged. Our civilization calls for distinctive preparation, for special lines of work,—especially for teaching. But we cannot wait for a student to go through college before preparation for distinctive work commences. These workers in special directions must come largely from the masses.

MR. ALLYN—A large part of the work of a normal school is academic from necessity. The people must be educated by the people. All the special schools must do a large amount of preparatory work. We are mingling work in each institution, but the energy is not lost.

MR. MOWBY—The paper presents one of the most important questions that will come before the council. We need to set off clearly the work of the different institutions. The progress of society divides institutions for specific purposes. There are not fewer students in our higher schools than formerly. In the old time the student was to be a lawyer, doctor, or minister. But not so to-day. The college makes leaders in every department of activity. Hence this differentiation in our institutions of learning. The colleges of to-day are giving *different work* than formerly, because of these special schools. It is desirable that all colleges recognize these different vocations in their departments.

MR. TARBELL—The paper leaves out something that a full discussion of the question requires. It says the two institutions for higher education are the college and the university. It is wrong to assume that a man that is to be a farmer will wait until after college before beginning his preparation for his life-work. Nor is it best that he should. These preparatory institutions have no place in the systems provided in the report. It crowds them too high or too low.

MR. ANDREWS—All courses of study are made for those who go through, not for those who do not. The ideal system, which is that of the report, is the one to place before the people. It has been remarked that some pupils go to school; some are *sent*. The boy of fourteen must be *sent*; he cannot go. The boy who goes cannot commence before twenty. But the boy who commences at fourteen and graduates at twenty-one is better prepared than he would be if he were to commence at twenty and graduate at twenty-eight. The boys should be sent to school rather than wait until they realize the importance of this preparatory training.

MR. GREENWOOD—This is a rapidly changing period; the normal schools cannot prepare more than a small per cent. of the teachers, owing to our rapid increase of population. The theory of the report cannot be made practical. The college expenses are too great to permit the poor boy to complete a course. The colleges do not provide a course of reading like that suggested by Supt. Peaslee. The student lives in the past, rather than in the present.

MR. BROWN said that the system of schools provided for in the report was the system of a century ago. The needs of the present are those of the past, and more. Our complex civilization demands schools for preparation for those vocations which, in the more simple life of a century ago, was made in the home. These are not provided for in the report. The college and the university, defined by the committee, are the necessary course for those who would become the leaders of thought in any department of activity. But for the preparation of those who are to follow their lead and do the actual work, schools of mixed character, giving both academic and technical instruction, must continue to exist.

MR. HINSDALE—The purpose of the report is to arrange a hierarchy of schools. The scheme of the report does not represent American education,—it is an ideal system. But what about the schools and the children, as they are now. How many normal schools have college graduates among their students? The report is not a generalization of the American system of to-day.

MR. CHAPIN said his first report included the high school as higher education. That might have been more satisfactory to some. The report is not wholly ideal. He has hope of the future. The tendency is to fall into the line of the system

suggested in the report, by slow movement. Students in the West are not *sent*, but they *go*; and the results in government, industry, and scholarship are such as would naturally follow from this voluntary attendance. The purpose of the college is to raise and maintain a standard of attainments for the education of the people. Something to work toward, though never actually attained.

MR. ANDREWS followed, illustrating and emphasizing the same thought.

REPORT OF THE COMMITTEE ON THE EDUCATION OF GIRLS.

TECHNICAL EDUCATION OF GIRLS.

In this report the term technical training may be used in a wider sense than some would allow. It can be made to include a preparation for the professions, as well as for the mechanical or industrial arts. There is an art of teaching; an art as well as a science of medicine; and the practice of every occupation depends on laws of its own. If we assume broad ground in this discussion, it is because the theme justifies much latitude in its treatment.

I. The value to boys of a course of special training is conceded. In addition to a course in college for the purpose of general culture, professional schools have always been considered a necessity. It would take a long time to enumerate the schools of applied science, the scientific annexes of colleges, and the technological schools that have been established in the United States, in the last thirty years. No one questions that a thorough technical training is of the greatest value to young men. But there is not a general agreement that this would be desirable for the other sex. The time was when common opinion held that woman should not be educated at all. Even now the sentiment is not universal in favor of giving her a higher education, and it can hardly be expected that a claim to give her technical education would meet with general favor.

This direction of public opinion, so far as it relates to the education of boys, is only reasonable and natural. The sentence pronounced upon Adam, was that he should earn his bread by the sweat of his face, and he bows reverently to that injunction, when in youth he prepares himself for a life of labor. But this decree of Eden applied with even greater force to woman than to man. With few exceptions, her life is one of ceaseless toil. A poet may sing that "men must work and women must weep," but the stern prose of life teaches us that women must both work and weep. Outside of the millions of women in the United States who are engaged in domestic occupations in their own homes, in 1880, according to the census, nearly three million women,

or fifteen per cent. of the entire wage-earning population of the country, were employed in some capacity of productive labor. We know how they are employed — as teachers, copyists and clerks; as stenographers, type-writers, and telegraph operators; as operatives in cotton and woollen mills and in the innumerable small establishments where deft fingers are required, but small wages are paid for service; in binderies, in laundries, in hotels and factories, there seems no end of the multitude of working women who throng our cities and towns. The number of women is small who have passed their school-days and are without regular employment. It is a very small percentage, whether married or single, who are not wholly self-supporting, and no one needs to look far to find those who have the burdens of others to bear.

And, yet, while woman is so generally a bread-winner, she rarely commands as large a compensation for her services as her brother, even when engaged in the same vocation. This seems due chiefly to two causes. *First*, in the small number of avenues of employment open to woman, she finds the supply greatly in excess of the demand. And *secondly*, not having prepared herself for the skilled industries as her brothers have done, she is compelled to take an inferior position and receive inferior pay. The first obstacle in the way of increasing her wages is gradually disappearing. Custom is admitting her to a much larger number of employments than would receive her a generation or even a decade ago. If the time ever comes when her education shall include a careful training for some productive industry, so that she will be competent to fill trusts of responsibility, there is no reason why her position and compensation may not be equal to that of man.

That this would result in the greater independence of woman, there can be no doubt. That this greater independence would be a benefit to society, some may deny. Possibly, if women found self-support less difficult, fewer would enter into the marriage relation; but anything that would tend to diminish marriages undertaken from so low a motive, could not be looked upon as other than a blessing. But the difficulty of maintaining the struggle for existence brings even worse evils to woman than such marriages, and if to any extent these evils could be removed by giving her an industrial training, such an education would be more than justified.

In discussing the higher education of woman, the question has been raised of its relation to true, womanly character, and it is proper to

inquire whether she would retain the position in the home and in society which she has held so well, if her education, should become so different in character. To this objection to her higher education, this has been said in reply: "Will woman's smiles cease to be attractive when they are brightened by intelligence? Will her conversation lose its power when strengthened by words of wisdom? Will her beauty of form and feature vanish amid geometrical or physical problems? Will her kingdom be circumscribed as her knowledge is enlarged? Will her companionship be less valued as her ability to counsel wisely and control judiciously is increased?"

The same criticism is pertinent to the question of the technical training of woman. To many, the thought of her deliberately preparing herself for a life of competitive toil is altogether repugnant. But in the same direction we may inquire, Would woman be less womanly if her knowledge of the human constitution and the laws of health made her competent to prescribe in the sick room, instead of acting in the subordinate capacity of nurse? Would she lose any of her peculiar power, if she were competent to supervise the work of the school, instead of filling the inferior position of an assistant teacher? Would it detract from her worth as a woman, if her scientific knowledge were so thorough that she could be the assayer or the practical chemist, instead of simply assisting in the office as a copyist or correspondent? If, instead of standing at the printer's case and setting type, she were able to fill the position of foreman in the job room? There is a certain prevalent opinion regarding woman's position in society that is mere sentiment. The mothers and wives in this country are valued for their qualities as practical women, and we admire them none the less because their hands show marks of toil. In the march of civilization the progress of woman has been toward this position of independence. In savage society she is a slave; in civilized society she often aspires to a position in which she is only a useless ornament; but her social condition will be best, when she becomes the recognized equal of man,—neither a slave to do his drudgery, nor an idle toy to amuse his leisure hours.

II. It is proper in this discussion to indicate some of the lines of industry which woman may properly undertake. In some of these, man has hitherto held a kind of monopoly; but there is no reason for woman's exclusion from them, if she is willing to make a thorough preparation.

1. There are certain learned professions which should be largely

filled by women. This is peculiarly the case with the profession of teaching. The special fitness of women for this calling has been recognized. They constitute about two-thirds of the number engaged in teaching in the United States to-day. It was evidently nature's design that woman should train the rising generation. She has more love for children and more power over them by far than man. She makes a better teacher; she makes an excellent principal, and possibly would be a better superintendent if she had the opportunity. The cause of education should be committed to her hands even more generally than at the present time.

There are many reasons why the medical profession should be largely in the hands of women. A woman is a born nurse; to minister to the sick is her natural vocation. A very large majority of those requiring medical attendance are women and children, and it seems especially fitting that they should be ministered to by female physicians, as well as female nurses.

Many of the duties belonging to the office of the ministerial profession might with entire propriety be transferred to the care of women. All of us know that to her willing hands, even now, is committed the burden of the work in all the churches.

2. There is a large number of occupations of a scientific character, requiring an extensive preliminary training, which are now regarded as altogether masculine callings, but the pursuit of them presents no serious obstacles to women. In this class of vocations may be named the work of the analytical chemist, the assaying of metals, designing of patterns, engraving, draughting, architectural designing, and some others. These are not occupations that require great muscular strength, or a degree of exposure that would make them objectionable to women. They demand ability, experience, and application, and success cannot be expected in them without a thorough preparation. There is no reason why women should not meet with distinguished success in any of these pursuits, if she will undertake them with proper training.

3. There are many mechanical occupations, usually in the hands of men, requiring delicacy of handling rather than strength, to which the supple fingers of women are especially adapted. In these may be included the setting of type, the carving of wood, and a long line of manufactures, such as the making of watches and jewelry, the construction of instruments, and many others which will readily be suggested. In many of these women are already employed in a subor-

dinate capacity. There is no good reason why, with a proper training, they should not as well hold the most responsible positions.

4. There are certain common occupations which from the beginning of time have been in the hands of women, which require scientific skill, but often fail to find it. Upon these depend very largely the charm and happiness of the home. The science of cookery, for hygienic and economic, as well as gustatory, considerations, should be thoroughly and generally studied.

A man may carry a hod, or shovel in a pit with absolutely no manual skill; but ordinary house-keeping is more complicated, and if servants were trained for the performance of its duties, home life would become more attractive.

In the feminine occupations of millinery and dressmaking, where mechanical skill and a cultivated taste play so important a part, there is larger room for preparatory training. It is difficult to understand how satisfactory results can be expected without thorough esthetic training in a vocation where harmony of form and color contribute so largely to produce the highest effect.

III. The line of studies to be pursued in a system of technical training for girls deserves some consideration. While this report will not undertake to prescribe a complete course of study for a girls' school of technology, it will offer some suggestions.

1. As in the case of existing technical schools for young men, a good academic education should be made a prerequisite for entering upon any higher technical course for girls. For those occupations demanding less training, the requirements need not be so severe. The theory that better results may be expected of specialists who have had a good general training, is recognized. It is in accordance with this theory that in technological schools the aims of general culture are constantly kept in view. To do any less for woman would be to continue her inferior chance in the world.

2. As in the case of young men, the special course would be determined by the particular occupation in view. It is not proposed to so revolutionize society that woman shall hold the plow and man repair to the kitchen; but if woman goes to the kitchen or to the shop, she should understand the principles that underlie her business so well that she might become mistress of it in all of its details, and not always look no higher than the lowest grade of employment.

3. If girls were to receive technical training as generally as boys now do, it would not become necessary to build up a new set of insti-

tutions for them, as much of their training,—possibly all of it,—could be obtained in schools already established. All that would be necessary would be to open the doors to the girls and bid them enter in. Here and there, possibly, a new chair would have to be established, but for a training for those pursuits which men now monopolize, ample provision has already been made.

In considering this subject, your committee has had in mind the improvement of the condition of woman, by giving her greater independence; and enlarging the field of her usefulness by multiplying the avenues of her employment and relieving the pressure in those occupations where she is now allowed to work. It may be claimed that she is wanting in that original power and those qualities of self-reliance so essential to reach the highest positions. But much of this difference in the sexes is due to the difference in their training after a certain point and to the force of custom in society. In the primary and grammar schools, girls find no difficulty in doing all their brothers attempt, and even more. In the high school and college, they seem in no respect inferior to their brothers, justifying the gallant remark of a distinguished journalist, not long ago, that "Men and women are equal, except where woman is superior." But at this point society discourages her ambition, with great emphasis, and tells her that she can go no further. She may teach or marry, but in all things her inferiority must be recognized. In no case must she be self-reliant, or independent, or courageous, for those qualities will make her strong-minded and unwomanly. After the high school, we seek for our girls desirable *finishing* schools, and having passed through these, their growth and progress are practically ended. But our boys call the day of their graduation from college their *commencement*, for then the battle of life begins. At the point where a young woman's mental progress really ceases, a young man is thrust into new circumstances that greatly accelerate the growth and development of his powers. It is not strange, though they have kept abreast to the close of school life, that the wide difference in the subsequent influences surrounding them, should produce marked differences in their characters. But if society should give woman an equal chance with man, she would probably remain more like him in these bolder qualities.

H. M. JAMES,

For the Committee.

REPORT OF THE DISCUSSION.

[REPORTED BY AARON GOVE OF DENVER.]

Mr. JONES said that Mr. Galton of England, author of *Hereditary Genius and Human Faculty*, who had made a special study of faculty in sex, held, in opposition to the generally-received opinion, that man's nervous organization was really more sensitive than woman's. Woman, so far, has not equalled man in those manipulations that call for precision and delicacy of touch.

Mr. SHELDON — Is teaching a part of technical education?

Mr. JAMES — Yes.

Mr. SHELDON — Horace Mann said that ninety per cent. of all elementary instruction should be conducted by women. I believe that the opinion was one of his greatest mistakes. A certain per cent. of the schools of Massachusetts would be benefited by more male teachers, especially girls' schools,—girls of the ages of ten to twelve. There is something in man's instruction that is especially helpful to a class of girls. If I had a few bad boys, I would seek to place them in the care of a woman teacher. I should like to see more men in schools. So many women are teaching not because they are better, but they can be hired cheaper, than can men. The lamented Dr. Philbrick was of the same opinion, and so expressed himself to me a few months before his death. Twenty-five per cent. of the women teachers ought to be removed, and men substituted.

Mr. HINSDALE — What per cent. of Massachusetts' teachers are males?

Mr. SHELDON — Five per cent.

Mr. HAGAR — Too low.

Mr. BOYDEN — Twelve per cent.

Mr. COY — The tendency of the paper is toward giving girls something more than teaching to do. I am connected with a large high school, and am impressed with a desire for an answer to the question: What can the girls do after graduation? Teaching alone is open to them.

Mr. JAMES — Two-thirds of the teachers in the United States are women.

Mr. ALLYN — There are too many women teachers in proportion to the men. But it should be remembered that many of the men occupy the position of supervisors, so that their influence on young people is correspondingly increased. The influence of men and women teachers should be respectively the same in power. The family is so constituted.

Mr. GREENWOOD — Mothers fail to teach the girls at home. They send them to school to learn school tasks, and neglect the housework. Labor is a good thing, whether in a boy or girl, and should be so taught. As clerks, men are more frequently dishonest than women. A first-class lady who is cultured is better as a superior than a third-rate man. There is a time in the history of a pupil's life when he should pass out of woman's teaching to that of a man. A woman's intuition enables her to solve a problem upon which man's reason has failed. Fifteen nervously-organized women teachers in one building are troublesome when supervised by a woman. A woman is weaker than a man in forming public opinion.

Mr. JAMES — In the family the father is of little account in the training of a child until the tenth year of its life.

Mr. PICKARD — The practise of medicine is not confined to nursing. The most important part is surgery. I am convinced by my own observation that woman would fail to be great in surgery. The larger part of ailments need no physician, and so we need more nurses and fewer practitioners. The strength of will and the strength of affection are different things. In childhood the latter is needed; later, the former assisted by the latter. Women, for several years, have attended

the medical department of the university with which I am connected, and occasionally have suffered embarrassment. That professors should incline to the idea that men, rather than women, should enter their ranks is expected. The exposures incident to the profession of a doctor of medicine are not fitted to woman's physical abilities. The severe riding, much night work, etc., would better be done by men. If the work could be divided, woman could take one part.

Mr. RICHARDS — Cannot females be trained to have as much self-possession as males? Much of the medical professional attendance could be avoided by intelligent nursing.

Mr. HINSDALE — We are quite apt to draw large conclusions from a single case. The common understanding of mankind with regard to the ability of the respective sexes in action in the emergencies of life may be accepted. Many important actions must be performed where self-reliance is called for in an eminent degree. The general sense of mankind is that man is more gifted than woman in successful qualifications for surgery. Woman will never distinguish herself in severe cases, even though the knife be not used. I have seen times in my house when no woman doctor could be depended upon.

Mr. HANCOCK — A social principle underlying this is, What is the best thing for women to do? The question is, what changes shall be made in the relations of labor? If one hundred women take the place of one hundred men, what becomes of the one hundred men? Is it a good thing to put the men out for the sake of putting the women in? To have a woman at the head of a family is the most important thing in the world. To place women in professions is to reduce the number of marriages.

Mr. ORDWAY — Let us throw over our prejudices. Women are not born nurses, they are trained. Trained nurses are valuable, both as women and men. Women have more nerve than men. They can be trained just as well as men to be surgeons.

Mr. CHAPIN — What is the technical training of women contemplated in this paper? What can be done for the girls now in the public schools in technical training in needle work, cooking, etc.? It would seem as though something should be done helpful to this class of pupils.

Mr. HAGAR — Boston schools instruct, to some extent, in dress-cutting and making. A cooking school has also been maintained at private expense, including the purchasing of supplies, carving, etc.

Mr. WHITE — I have taken little interest in the discussions on the comparative abilities of men and women for various employments. Women can take care of themselves, so far as selecting their work is concerned. The question is, "Shall a woman who is qualified to perform a certain task be permitted to undertake its performance"? Inasmuch as all skilled labor requires special preparation, or special training, opportunity should be given the workman to prepare himself for such labor. Woman will fill well any place to which she aspires, providing she prepares herself for such place. We have a large number of women who are capable of doing skilled work. We must not shut the doors of special training against them. Women will select their work wisely.

Mr. HAGAR — A number of graduates of the school with which I am connected have, since their graduation, studied medicine, and are now successfully practising,—in one case with an income of \$20,000 a year.

Mr. FAIRCHILD — The agricultural school of Kansas provides a course of study in technical education for women. The first year the student is taught needle-work and dress-making. During the second year, after one term in chemistry, a term is spent in cooking. The teacher gives daily lectures to the class; the sub-

ject is taught as other subjects are taught, while the students have an hour's practice a day in the model kitchen; next, domestic dairying, especially butter-making. Later, after elementary physiology, is a special course of hygiene, also regarding household comforts. That kind of training, intended to assist the woman in making a living, is given. A printing office is attached to the school. One of a former class is now conducting a paper in California. A telegraph-office permits the learning of telegraphy. Several are now successful operators. A type-writer gives opportunity for learning stenography and kindred arts. And so it would seem that there is abundant room for the extension of opportunities for the technical education of women.

Mr. ORDWAY — Harvard college allows women to attend lectures and prosecute their studies under its auspices, but wrongfully withholds from them a degree.

REPORT OF THE COMMITTEE ON TECHNOLOGICAL EDUCATION.

PEDAGOGICAL VALUE OF THE SCHOOL WORKSHOP.

1. By a school workshop is understood a department of a school which, for example, may be a regularly organized and graded public school, conducted in the usual methods for instruction in its primary or secondary stages; that this department, or shop, is to be furnished with materials and tools, especially with rightly trained teachers, and with whatever facilities may be needed to teach all the pupils of the school, or, at least, all who wish such instruction, the uses of some varieties of tools, and the methods of producing some varieties of manufactured articles. The materials usually considered useful for this purpose are wood or metal, and of the latter chiefly iron. The tools are those used by the carpenter, joiner, or cabinet-maker, or by the smith, foundryman, or machinist; but there appears to be no principle of natural or ideal selection which should choose these. For the purposes of this inquiry, a shop where attendants upon regular school discipline are taught systematically the processes of shoe or harness-making, or printing, or pottery, etc., would be properly included under the term "school workshop."

We are to consider this shop as designed for instruction, and not for profitable construction or manufacture. The product is to be not work, but workers; the work itself being only a by-product, whose utility is to be measured merely in proportion to the service it has rendered in imparting instruction. The question of money-profit is not to be raised.

2. In considering the pedagogic value, we are to estimate the results not as the production of workmen, that is, persons skilled in the arts and methods of any specific trade; but as the production of workers, that is, persons whose capacity for work is general, and whose ability to adapt themselves to any specific work which they may choose, shall have been developed as part of the general training, discipline, and culture, which are to be the outcome of their pupilage. More than

that: we may be required to say what, if any, have been the kind and degree of spiritual excellence, mental or moral, which in the make-up of large scholarly character may be attributable particularly to workshop training, and which might have been, perhaps would have been, deficient or entirely wanting but for the workshop discipline.

3. The work done in the shop will be of two kinds; first, outward, visible, upon material substance, as upon the wood or metal manipulated; second, inward, psychological, upon the spiritual nature of the manipulator.

In the first, the pupil is required to take a mass of rude, and relatively shapeless material, and to produce from it, by a series of processes more or less complex, another form, more refined, more exact, which, it may be, will satisfy certain conditions of adaptability to other forms, for purposes of construction; or it may be, at least in the more elementary stages of instruction, that, so far as the thing made is concerned, the satisfaction of the conditions is itself the purpose and the end of effort. This development of the newer and more refined form is done by the removal of the needless and extraneous matter that envelops and masks the finer outlines within the grosser and shapeless mass; or it may require the change or flux of material from one position or form to another—but in either case the transformation is effected by the use of certain implements which are called tools.

In the ordinary or commercial shop the value of the product is determined by the subsequent utilities for which the pieces wrought are found to be adapted. In the school workshop the value of the product is chiefly dependent upon the service it has already rendered during the steps of its construction, in the improvement in some way of the pupil worker himself.

4. Here appears, in some measure, the discrimination between the economic and the pedagogic value of the work, which values, indeed, are not easily distinguished in all respects. The workman repeats his work with great care and circumspection, that he may make his work better, and that he may produce it more abundantly. If he seeks to make it better, that, being better adapted to some purpose, it may find quicker or more profitable sale; and if he seeks to make it more quickly, that his time may yield more abundant profits, each of these is a way to increase the economic value of his efforts. If his purpose is to make himself a better, that is, a more skilful, workman, because such workmen command better wages or accomplish more salable products, even then, although his motives have become a step or two more

remote, they are still economic. But, if his labor and his care for exacter workmanship, and for more excellent results, tend, purposely or incidentally, to make the workman a larger and stronger and perfecter man, then they are pedagogic.

5. We turn, then, to consider that other work of the shop, the inward, psychological, may we say, subjective, influence upon the workman himself.

First, because it stands first usually in the thoughts of those who speak of this subject, we note the skill or workmanship of the workman, or that indefinite and mystical something, which is too often only a resounding phrase — the use of tools. This knowledge or skill may or may not have pedagogic value ; it may be referable wholly to the other or economic side, according to the purpose of him who acquires it or the use which he may make of it.

6. If, however, it should be objected, that this statement is too restrictive and that anything which makes the workman a better workman, has its pedagogic as well as its economic value, then another discrimination must be made.

Workmanship, or skill, is of two kinds. The first is intelligent ; the second is mechanical. The first is directive ; the second is executive. The first constantly observes the changing conditions as they present themselves, and as constantly adopts or creates new means to meet the new requirements. It is continually discerning how the thing in hand may be done to better purpose. It is in some degree intuitive and innate, yet is capable of large development by proper cultivation and use.

The second form of skill is that power of manipulation which is acquired by multitudinous repetition until the process, or the movement, usually in a large degree muscular, becomes mechanical and habitual. The workman comes to do the thing, to make the movement, simply as part of a machine, and in many cases the more implicitly the man gives himself to the habit after it is once formed, the more perfect is the work that is done. The formation of the habit requires long, patient, persistent effort.

These two elements, the intelligent direction and the habitual or mechanical performance, enter as co-ordinate factors into every constructive act, but their relative importance varies in every possible ratio. Mathematically expressed, the results might be indicated as the product of A, the intelligent direction, into B, the mechanical performance ; the result being expressed by $A \times B$; in which expression we

shall find as limits $O \times B$ or $A \times O$; in each case the value reduces to O .

An illustration in which the first, or intellectual, factor predominates, will be found in that part of the machinist's work in which he arranges his work in the lathe, sets his cutting tool at the proper angle, determines the speed of his cut, etc. An illustration in which the mechanical factor predominates will be found in another part of the machinist's work in which he is using the file or the cold chisel. Only correctly formed mechanical habit will give good results. The smooth knitter is one who holds the yarn habitually and unconsciously, at a proper tension ; the moment that the attention is called to this element of the work, the strain becomes varied, and the work is proportionally bad. The rapid type-setter does not look at the faces of his type ; by an unconscious habit his fingers find the nicks in the sides of the bits of metal, and they seem to drop automatically into their proper attitudes.

7. Hence comes the well known fact that the simpler tools are those which are the most difficult for masterful use. A man can learn to manage a planing machine or a jig-saw in a small part of the time it will take him to learn to hew with the broad axe, cutting confidently to the center of the line, and leaving always a smooth, unscarred, and vertical plane surface. The intellectual effort in this work of the broad axe, is relatively small. The body must become a machine ; legs, trunk, and arms must come into exact mechanical relations, the blade of the axe being the salient or working part. When this human machine works with mechanical precision, the man becomes a good axeman and not sooner. Even then a well controlled circular saw will do better work. As the intellectual activity of the axeman's work is small, the intellectual development is proportionally feeble.

8. And this leads us to note, in passing, a common and not very unnatural error concerning the use of tools, namely, that skill with one tool begets skill with another. If the skill is intellectual, the statement is true ; if the skill lies in the habit which results from long practice, the statement is not true. One habit always stands in the way of another, which lies, so to say, in the same horizon. Men have been heard to say that they did not know how to drive a nail. The driving of a nail into wood has two elements : first, to choose the right place, set the nail in the right position as to the direction it shall take and the proper facing of the wedge that the wood may not split ; second, to strike it properly. The first part is intellectual, and any man of

sense can learn it in one attentive lesson; the second is mechanical, and the very clang of the reverberating hammer will report to the practiced ear whether the striker has mastered the stroke. Now let the man who is adept at driving nails into wood, sending them ringing to their places with unerring dispatch, try to drive shoe pegs, and witness his utter discomfiture. The shoemaker's dexterous knack sends each peg home with a "tump," while the carpenter's habitual stroke breaks every one, until he has unlearned his nailer's stroke, and has learned that which drives pegs, the difference between which no man can formulate. Hence the philosophy of the saying, "Jack at all trades is good at none."

9. And in this light vanishes the false generalization of that saying that all tools resolve themselves into the mystic number seven, including the axe, saw, plane, hammer, square, chisel, and file; a list which does not include all the tools essential for working either wood or iron, and which excludes the implements with which more than half the mechanics of the world earn their bread. But the essential defect of this statement is that the tools which are supposed to be grouped together, do not conform to the generalization. Thus the first in the list, the axe, must be taken to include the two-handed narrow axe of the woodman; the two-handed broad-axe of the hewer; the one-handed semi-broad-axe, or hatchet; and the adze, that marvellous instrument of the shipwright—tools which differ essentially in shape, weight, method of grinding, adjustment of handle, and in the peculiar swing and skill of use. Skill in the use of one tool does not presume, and seldom leads to, skill in the use of another.

10. The peculiar mechanical side of one's tool-training possesses but a small degree of educating or pedagogic power. If this were not so, there would be found in the daily routine of the ordinary economic workshop, and in the habitual mechanical skill which is there laboriously acquired, a very considerable compensation for the loss of the educating or pedagogic power of the schoolroom. If there were this compensation, the fair mechanic ought to be a man of larger judgment, having a better appreciation of life, its opportunities, methods, purposes, and results, than is found to be the fact. The ordinary workman, even the skilled workman, is often found to be blindly conservative as to the details of his own trade. He is so rarely an inventor, that the few cases in which he does break through the encrusting influence of habit, become items of especial interest and remark.

11. Pursuing again our inquiry as to the effect of shop training

upon the mental powers of the pupil, we note a series of effects upon his intellectual concepts or cognition.

(a.) First, we note a better knowledge of mathematical concepts in their physical or concrete phases. Logically, this knowledge must precede construction; that is, the student must have a concept of a plane surface before he can by intelligent purpose produce a plane surface; he must have a fairly adequate concept of a cube before he can cut a cube from any surfaces, etc. Chronologically, the processes by which these concepts assume relations and exactness often accompany the processes of manipulation, and the ideas acquire clearness and definition as the work proceeds. The pupil who has filed up a cube from a block of iron, pursuing, step by step, its several faces, and bringing them into proper angular and dimensional relations, will probably acquire a very adequate conception of that geometric form. But if we should say that he has thus acquired a concept clearer and more perfect than could be obtained in any other way, we should assert that Newton, Kepler, and DesCartes never had an adequate conception of a cube.

(b.) The pupil, feeling for his cube in a state of semi-blindness, will doubtless cut several faces of several forms other than that which he finally secures. Later, when he has acquired the skill of an intelligent workman, he will be able to locate in the outset the form which he will derive from the rough mass. He sees the finished product nearly as well before he struck a blow, as he did when his work was done. The old Scotchman described in Hugh Miller's "Schoolmasters" cut in three days, stone columns which were ordinarily counted six days' work, because he had acquired such an insight as discerned the finished column in the rough block, and he cut fearlessly and confidently down to the surface of that ideal.

(c.) It is probable that while the construction is going forward with the concrete, the perfection of the concept may be developed in the thought of the learner, while he simultaneously discovers that the perfecting ideal constantly recedes from him, and eludes his grasp. The ideal mathematical existence, as a perfect square, cube, or circle, is never so real to us, as when we have pursued its refining perfection to the extent of our finite capacities, and have discovered then and there that the absolute is yet beyond and above our grasp. The learner in the shop is required to produce a piece of wood which is straight, square, out of "wind," and of prescribed dimensions. He presently offers the piece that satisfies his concepts

of the conditions, and learns from the tests applied by himself or his instructor, that his piece is deficient in each of the conditions which were imposed; the edges are not straight; the sides and ends are not squared; the faces are not planes; the dimensions are not exact. From this labor and its subsequent tests have come to the learner better concepts of the conditions demanded.

(d.) Through similarity to concepts of form which are purely mathematical, the work in the shop will aid in forming a large series of concepts of the physical properties of material things, such as of hardness, density, brittleness, etc.; that one wood differs from another in texture and hardness; that brass, high and low, and copper, and iron, wrought or cast, tempered or annealed, are all different, and how they differ. In other words, the workshop becomes, in some sense, a laboratory for testing and learning the physical properties of bodies.

(e.) If the instruction is efficient, it will be evident that ideas of accuracy of measurement, precision of adjustment, exactness in every particular, as well of things and parts unseen, as of those which are visible, will be acquired and practiced to a degree which will depend rather on the moral tone which lies in the heart and conscience of the student worker, or is imbibed from his teacher, and fostered by the combined force of precept and example, than from anything inherent in the work itself. It was said by an eminent chemist, that up to a certain point of accuracy, chemistry depended upon science; beyond that, upon honesty. The same is true of all physical manipulations. The hand is not more truthful than the tongue.

12. Some questions naturally arise concerning the cognitions and concepts which have been described as developed or acquired from the training of the school workshops.

1. Are they of such a nature that they cannot be acquired from other sources, *e. g.*, observation, drawing, or moulding in plastic material?

2. Can they be obtained as readily and as completely by other methods as by the training of the shop?

3. How will the mental stimulus which they furnish, and the development which they foster, when attained through shop-training, compare with such results, when they are attained by other means?

4. Are they, however obtained, of large pedagogic importance as part of the general training and culture which all youth should receive? or

5. Have they rather a specific value, as part of the special training which those pupils should receive, who are fitting themselves for subsequent pursuits of a technical or mechanical nature?

6. If thought to be desirable as part of the general discipline which all minds should undergo, how shall their influence be counted in comparison with that which may come into the development of the intellectual and spiritual nature from other lines of pedagogic effort?

The answers to these questions, taken in their order, will probably be found to diverge more and more widely, according to the variation in the fundamental bases of psychologic study which the different respondents have adopted, and in the directions in which they have been accustomed to approach pedagogic subjects.

(Signed by)	SELIM H. PEABODY, <i>Chairman</i> , JOHN M. ORDWAY, EMERSON E. WHITE, GEORGE T. FAIRCHILD,	}	Committee.
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DISCUSSION ON THE PEDAGOGICAL VALUE OF THE SCHOOL WORKSHOP.

[REPORTED BY W. A. MOWRY, OF BOSTON.]

DR. PEABODY read from the report that "We are to estimate the results not by what the work does in introducing *workmen*, but upon what it does for the *workers*; i. e., in general culture."

MR. BROWN—Does not the report limit the workshop to those who have had a previous training?

MR. PEABODY—No, I think not.

MR. RICHARDS—Is the value of the shop to be reckoned as producing workers, or as affecting them socially? Will not a knowledge of handwork affect men socially, sympathetically; harmonize laborer and capitalist? Will not the workshop give men sympathy and understanding between worker and capitalist? The question is, Shall we have the workshop in the schools, elementary and higher?

MR. WHITE—That question is not raised at all. The school workshop is defined. In the report we are to consider its educational value. Is it true, and, if so, *where* does the school give a disrespect for labor?

MR. RICHARDS—The pupils come out with the idea that they are not to labor with their hands.

MR. JONES—Is Washington a city of labor?

MR. RICHARDS—No, it is not, unfortunately.

MR. CHAPIN—Is the report designed to *exclude* practice in an ordinary workshop?

MR. PEABODY—That will depend upon the object, whether the result aimed at is mechanical, or economical, or pedagogical.

MR. GREENWOOD—Pedagogical value of the workshop; to whom does this apply? to the farmers' boys or the city boys? Is the psychological influence upon the teachers or the pupils?

MR. WHITE—Let us narrow the discussion to the *school workshop*. The educational value of the school workshop is the milk in the cocoanut.

MR. PEABODY—If the man's work is to adapt it to some *special* purpose to increase the *value* of his work; his motives are economic. If the object is to make the worker more of a *man*, then the object is pedagogical.

MR. ANDREWS—Then the agricultural college is to be commended for its *pedagogical value*. An agricultural college, so far as it is an educational institution, is of pedagogical value.

MR. PEABODY—Discrimination between the economic and the pedagogic value tends to make the *workman* a larger and stronger man; the effect is pedagogic.

MR. GREENWOOD—What is a *school workshop*?

MR. RICHARDS—A school workshop, under any condition, is a shop in which the improvement of the *worker* is the chief aim.

MR. PEABODY—Now we are to consider the work of the shop in its effect upon the worker. Workmanship and skill is of two kinds,—intellectual and mechanical. The results will be as the product of *I x M*.

MR. ANDREWS—How do you define the distinction?

MR. PEABODY—This is the difference,—Teaching by the master of the apprentice is to produce *direct results*, in money value; in the school workshop the object is to affect, *intellectually*, the worker.

MR. BOYDEN—To what end is the work of the pupil to be directed? Is it to get the use of tools, or to make apparatus to illustrate his other lessons?

MR. PEABODY—The end will be the acquisition of skill, which he can turn to any good purpose; he may not *know* to what end. The other end is, what effect it has upon himself,—his character. After some preliminary practice, he may turn his work to some more immediate practical purpose.

MR. HANCOCK—What is the real pedagogical value of the school workshop? How does it affect the will, etc.?

MR. ORDWAY—We have very little to do with the will of the pupil. We have reference to his actual needs, not to his will.

MR. CHAPIN—Is the pedagogical value to exclude the advantages which come to the apprentice? Under the modern trade-union system, boys have no opportunity to learn a trade. Now, shall we establish these trade schools?

MR. HINSDALE—What is the fundamental question?

MR. WHITE—It is well stated in the paper—admirably.

MR. FAIRCHILD—In the industrial section.

MR. BROWN—The value of the school workshop on its psychological side, is the question before the Council.

MR. BOYDEN—The psychological value depends much upon the spirit and motive of the pupil who goes into it.

MR. PEABODY—What are the height and breadth of his purpose? Is it in building a water-wheel, or for a more distinct result, and, at present, less tangible?

MR. ORDWAY—Many pupils have very little purpose. They may wish to make a wheelbarrow, but are not prepared to take our lessons.

MR. PEABODY—There are two purposes,—pedagogical effect and practical skill. Skill in one tool does not beget skill in the use of another.

MR. WHITE—We have now reached *the question*; as it seems to me—the fundamental question. The workshop is deserving a place in the school, only as an educational instrument,—not to teach trades. Hence, if the workshop enters the school, it must be for its educational value.

MR. GOVE—If the advocates will be kind enough to put this question just in that light in their several communities, it will be of great service. The commonly given reasons for the introduction of the school workshop are different.

MR. HANCOCK—Does not Dr. White draw the line a little too closely? Must we not also consider the economic advantage?

MR. PEABODY—Both are to be considered.

MR. ORDWAY—The chief educators of Europe put this matter, primarily, on the psychological ground,—not the mechanical or economic.

MR. WHITE—The public press generally pushes the other side,—the economic. The workshop can only come into the schools upon the pedagogic side.

MR. GREENWOOD—The boy or girl in the public school will make better progress in his or her studies by three or four hours of work, daily. This sets the blood at work, and puts more iron into it. This will prevent the dry rot of the school-room so often seen, and bring the muscles of the body under the control of the will.

MR. WHITE—Would not this principle apply to the skating-rink?

MR. HINSDALE—In Cleveland, some gentlemen organized a company for a manual training-school,—a joint stock company. It is not a part of the public-school system. 150 boys are given three lessons a week. For the special accommodation of the high school boys, three days in the week are given, in the afternoon. These boys are the best boys in the high school. The high school teachers say that the boys who go to this school do better work in the high school. How far is this due to the character of the boys? I think there is a good influence flowing from this manual training-school, upon the high school studies. I think we are compelled to recognize a correlation of these forces of intellectual and physical training.

MR. JAMES, Nebraska—In the high school, Omaha has established a manual training-school in the basement of the building, with a carpenter's shop. There have been four classes, twenty boys in each, since October 1. A lesson, one and one-half hours in length, is given in simple carpentry,—the saw, chisel, etc. Seventy-five out of seventy-nine boys remained in the school throughout the year. There were excellent results. They made great progress in the use of tools. Every boy has taken the full amount of academical work, and has seemed to do it better.

MR. PEASLEE—Were these lessons in or out of school hours?

MR. JAMES—Lessons are given at all hours of the day; one division at three o'clock, out of school hours, by volunteers. It is a novelty with Omaha boys. One-half of them are high school boys.

MR. HANCOCK—Has any one had experience of years? Novelty is quite an element in these cases.

MR. FAIRCHILD—I have been for many years, not in the public school service, but in the Kansas Agricultural College. We all agree as to the pedagogical value of this manual training.

MR. HINSDALE—Is there a tendency toward, or from, truthfulness in this work?

MR. PEABODY—I do not think there is any definite moral tendency, one way or the other.

MR. WHITE—While the members of the committee all concur in this report, I wish to state clearly that it does not commit me to the position that the workshop should be introduced into our public schools. The workshop, doubtless, has some pedagogical value, but is it such that we ought to introduce it into the school system? Examples, with exceptional students and teachers, are not to be taken as carrying much force. I do not believe there will be, permanently, such advan-

tages from this mechanical training as will justify its introduction into our school system, entirely outside of its economical value. The knowledge thus acquired does not compare, in accuracy, with that gained in the physiological laboratory. Most boys have the concepts before taking these lessons in wood and iron. May not the military school give better physical results? Three per cent. of the working people of the country can produce all the woodwork needed. The school workshop cannot touch the life-work of over ten per cent. of the pupils. The manual training-school must take its place as complementary to the public school,—as a special school, like the law school. The schools of mechanics at Champaign and La Fayette are used as a means of special education to prepare young men for leaders in special pursuits. For some five years I had the opportunity to observe the educational results of the tool training of one of the best school workshops in the country; and I am sure that its chief value was as a means of special mechanical training—not as an element of general education.

MR. RICHARDS—Will not a boy who can work out a good job write a better composition?

MR. WHITE—Everything that a boy does *well*, helps him to desire to do other things well; so will the military school.

MR. PEABODY—In regard to these questions, I will say that the committee have in this report answered in regard to the general value of shop-work. The committee have not had time to consider these questions so as to give a definite answer. They therefore leave them as questions for discussion.

MR. BROWN—Shall we introduce the workshop, or endeavor to obtain the same results from drawing and other means? There are but few concepts and processes that belong to the workshop exclusively. By mechanical and object drawing the pupil exercises perception, memory, comparison, and his mind secures the control of the muscles of the hand and eye. I do not know of a school west of Ohio where the pupils secure sufficient command of the pencil to draw that desk so that I can recognize it. Perception, memory, comparison, are all trained and disciplined; and the control of the muscles is obtained by the mind in drawing, as well as in the workshop, by practice in iron and wood work. The workshop can be defended as a gymnasium. You can utilize needed exercise in this way. It is a matter of such expense that it is not practicable in common schools. It will load the school system with too heavy a burden.

MR. ORDWAY—There is a question whether there is a *newer* education; and if so, what is this *newer* education? I believe it is in laboratory work. The laboratory work in physics and chemistry is the *newer* education. Then the biological laboratory and the botanical laboratory, the zoölogical laboratory, and the microscope in physiology. There are two systems in this country,—the Russian system and the American system. By the first you make, perhaps, one corner of the desk; by the second you make the four corners,—the entire desk. Those who through their course of instruction have used the laboratory, have common sense. The boys of twelve or fourteen years are not mature enough for the chemical or physical laboratory; but they can go into the mechanical laboratory and learn the use of tools. We want men who can do—who can *execute*. They must be trained in the laboratory.

MR. HANCOCK—Professor Ordway's argument went to the economic end rather too far. Is it of great moment to us all that we can judge accurately of the width of a board? We must select for ourselves, the field of knowledge is so wide.

MR. ORDWAY—What I have said is not in reference to the economic aspect of the case, but only to the educational side. We are not concerned with specialists, but in educating men and women.

MR. WHITE—To have concepts of things, we must go to the things. Are not nearly all the mathematical concepts acquired in a school of mechanics found in the kindergarten and primary school?

MR. ORDWAY—The logic of the lawyer and the logic of the scientific man differ materially.

MR. BROWN—Will you state, Mr. Ordway, just what we can learn in the workshop that cannot be learned elsewhere?

MR. ORDWAY—I decline to do it. The question is Where can we get these concepts best? Each portion of study helps every other.

MR. FAIRCHILD—All our training in science is through the laboratory, in connection with books. We have found the mechanical laboratory of great practical value in preparation for the physical and chemical laboratory.

MR. GREENWOOD—The order of life each day, for child and man, is food, exercise, rest, sleep. Exercise is physical and intellectual. The physical aids the intellectual. Distinguished men combine these two kinds of work,—the abstract and the concrete; or, the intellectual and the mechanical.

MR. ANDREWS—Is a laboratory established for the same purpose as a workshop? I enter my protest against the theory that a laboratory is a *sine qua non* to an education. I do believe in the great value of a chemical laboratory; but when it is said that a man who has not worked in the laboratory is not an educated man, I protest. I teach civil polity. Can we bring the jury into the laboratory and work them over? Many things cannot be put into the laboratory. I believe in the intellect. I do not believe the great men of the country come from the laboratory. Chauncy Depew, who has been elected president of the greatest railroad,—was he ever in a laboratory?

MR. ORDWAY—Boys of twelve cannot study political economy.

MR. HINSDALE—The experiment in Cleveland of a manual training-school must not be overestimated. Our population in this country is changing. Country children find value in handling things. The massing of our population in cities has proved deleterious to the education of the young. Children in cities have difficulty in appreciating the meaning of words.

MR. FAIRCHILD—My three boys have been trained in a workshop. One is now in a classical college,—a good one. They have developed faster than I did. I believe the workshop enabled them to take hold of things in the right way. This boy in college has an advantage over his classmates by means of the workshop.

MR. PEABODY—For many years I have worked to develop the material and technical relations of education. I have sought so to direct my own work and that of my pupils that there might ever be an open bridge between the theories of science and the familiar facts of every-day life, that each might be better developed by constant contact with the other.

It may be that I have not looked as earnestly as I might have done, but I have not been able to discern such valuable results from hand-culture as my friends seem to find. I do not find that the exact construction of a box leads to the exact construction of an English sentence, but that mechanical students need as much drill in writing as any others. I have not found that the students in mechanical courses were especially good in their mathematical work. On the contrary, I do find that the best workers in wood and metal are they who have proved that they have clear thoughts and can express them clearly, and they who have shown large mathematical ability. Is it not possible that in these materialistic days we push the methods of the laboratory too far? May not the gross and material concepts gathered in the shop so stand as to obscure the clearer and exacter intellectual

concepts? The highest ideal of an ellipse is not that found by the actual section of a material cone. It is the purer and more luminous concept developed in the mind by its own acuter activity; that activity which alone can discern the etherial pathways traversed by the planets in their perennial circuits about the sun. Pupils often complain, when approaching the study of pure science and of psychology, that hitherto they have been taught only from things which they could see, or taste, or touch, and that for that reason they found great difficulty in comprehending those grander cognitions which give the highest stimulus to, and mark the noblest development of, man's almost divine intelligence.

A TRIBUTE TO THE LIFE AND CHARACTER OF JOHN D. PHILBRICK, LL. D.

John Dudley Philbrick was born in Deerfield, New Hampshire, May 27, 1818. He was the son of Elder Peter Philbrick, a clergyman of the Freewill Baptist denomination, and Betsey Dudley.

He fitted for college at Pembroke Academy, in Pembroke, New Hampshire, with the exception of two terms spent in study at Strafford, New Hampshire. He was graduated from Dartmouth College in 1842.

He was a teacher in the Roxbury Latin School, at Roxbury, now a part of Boston; in 1842 and 1843. He was made a teacher in the English High School in Boston in 1844, and the next year was chosen principal of the Mayhew School in Boston, which position he occupied till elected master of the then new grammar school in Boston, called the Quincy School, in 1847. He served as master there from 1847 to 1852.

During the early years of his teaching in Boston, he studied law to some extent, and, contrary to the commonly expressed opinion, it was not till 1847, the year that he took charge of the Quincy school, that he decided to adopt education as a profession.

He was called from Boston to the State Normal School at New Britain, Connecticut, and served there as principal in 1853 and 1854. He was superintendent of the public schools of the State of Connecticut in 1855 and 1856.

He was superintendent of the public schools of Boston, from December 22, 1856, to September 1, 1874, and from March 1, 1875, to March 1, 1878.

He was agent of the Massachusetts State Board of Education during a part of 1875-6, in charge of the preparation of the Exhibition of the Education and Science of the State at the Centennial Exposition at Philadelphia; Massachusetts Special Commissioner of Education, and United States Honorary Commissioner, and Member of the International Jury, at the Vienna Exposition in 1873; and Director of the United States Exhibition and Member of the International Jury, at the Paris Exposition in 1878.

He was at different times one of the editors of the Massachusetts Teacher. He was, also, editor of the Connecticut Common School Journal for two or three years, when employed in that State.

The following are among his published works :—Annual Reports of the Public Schools of the State of Connecticut for 1855 and 1856; twelve quarterly and thirty-three semi-annual Reports of the Public Schools of Boston, and several special reports relating to these schools, printed in the annual volumes of the Reports of the School Committee of Boston from 1857 to 1878 inclusive; the Reports of the Massachusetts State Board of Education to the Legislature for the years 1865 and 1872; Report as Director of the United States Exhibition at the Paris Exposition of 1878, printed with Reports of the Commissioner in Chief; article *Etats Unis, Dictionnaire de Pedagogie Paris*; several lectures and papers printed in the volumes of the American Institute of Instruction, of the National Educational Association, and circulars of the National Bureau of Education; articles for the Atlantic Monthly and North American Review, 1881; Catalogue of the United States Exhibition of Education at Paris, 1878, (pp. 124) London; printed at the Cheswich Press; American Union Speaker, (pp. 588), Boston, 1865, and second edition, (pp. 536), Boston, 1876; the Primary Union Speaker, (pp. 110), Boston; City School Systems in the United States, published by the Bureau of Education, 1885; and School Reports, printed in the Proceedings of the Council, 1885.

I am not certain that the list is complete; but it does not include a considerable number of unpublished lectures and addresses.

Dr. Philbrick was president of the Connecticut State Teachers' Association, the Massachusetts State Teachers' Association, the American Institute of Instruction, and the National Educational Association. He was a member of the National Council of Education, member of the Massachusetts Board of Education for ten years, member of the government of the Institute of Technology from its establishment in 1861 to the time of his death, and a trustee of Bates College for ten years.

He received the degree of LL.D. from Bates College in 1872, and from St. Andrew's University, Scotland, in 1879; was made Chevalier of the Legion of Honor, France, 1878, and also received the Gold Palm of the University of France with the title *Officier d'Instruction Publique*.

His foreign travels in 1873 included visits to Liverpool, London, Paris, Vienna, Prague, the principal cities of Germany, and Brussels; and in 1878, France, England, and Scotland.

Such are the positions he held, the works he wrote, and the marks of honor he received. Let us now examine with more care some of the results of his labors.

Like many of the older teachers of New England, he laid the foundation for his future success in the old district school. He taught in such a district in the town of Danvers, Massachusetts, several winters while in college. Here he was noted for his devotion to his school, and for his interest in a small society of teachers of the town, mostly college students like himself, who used to meet in various parts of the town for mutual help in regard to their professional work. The lessons of professional help from association and conference that he here learned from experience, he never forgot. Perhaps there is not a member of this Council who has contributed so largely of time, travel, and talent to the various associations of teachers in this country as our lamented friend. With what patience and interest, too, he listened to the essays and discussions of others. For he welcomed free interchange of views as the best means of clarifying one's own mind. He was the most sincere lover of criticism, even adverse criticism, that I have ever known. How often I have heard him say, "We should be thankful for the criticisms of our enemies; for our enemies will tell us our faults, a thing which our friends are reluctant to do."

Then what deference he always paid to the opinions of those whose wisdom and experience entitled them to consideration. He had no patience with educational charlatanism; but for a sincere student, for honest experience, his respect was genuine. How many of us have been encouraged to excel ourselves by his appreciative consideration of our opinions based on careful observation. This spirit made him both a teacher and a learner at our conventions.

Of Dr. Philbrick's work in Connecticut I will let Charles Northend speak. "He came here [New Britain] in 1852, at the request of Dr. Barnard, to take charge of the State Normal School, a position he filled with rare ability and success. Some two years later, Dr. Barnard resigned the State superintendency of schools, and, on his recommendation, Mr. Philbrick was made State superintendent of schools and principal of the normal school. Of him at this time Dr. Barnard wrote to the president of the State Teachers' Association as follows:—'Mr. Philbrick is a wise, practical teacher, of large personal experience in every department of the educational field, and has shown himself willing to labor 'in season and out of season,' and to 'spend and be spent', in the cause of popular education. He enjoys the highest respect and

love of the teachers, and by his ability, common sense, and devotion to his duties will deserve and secure the confidence and co-operation of the people of the State.'

Mr. Philbrick remained in this State about five years, greatly to the benefit of the normal school and to the cause of education throughout the State, and when, in 1857, he resigned his position here to accept the superintendency of the schools of Boston, it was greatly to the regret of the friends of progress in school work ; but brief as his stay was here, he was instrumental of great and lasting good.

I will close this article by naming two or three particulars in which Dr. Philbrick excelled, and to which his great usefulness and eminent success were largely owing :

1. He was a perfect gentleman,—always courteous, and kind, and winning in his manner, by which he both made and retained friends.

2. He was a man of great earnestness, sound common sense, and good judgment ; a man of great firmness and persistent effort in the execution of his views and plans.

3. Dr. Philbrick had the rare faculty of gaining the good will and hearty co-operation of all in any way associated with him. He always most cheerfully accorded to all their full share of merit for what they did, and inspired them with the feeling that he was their true friend."

Dr. Philbrick's first important work in Boston was in making the Quincy school a success. To understand the significance of this work, we must remember that the organization of this school, under Mr. Philbrick, was the beginning of a new departure in school management in the city. Up to that time, 1847, the old "double-headed" organization had prevailed. "By this singular arrangement each school had two departments, called the reading and writing departments. Each of these departments was accommodated in a separate apartment ; each had its separate set of studies ; the programme of studies being divided for this purpose, not horizontally by grades, but vertically by subjects ; each had its master and corps of assistants, usually two or three in number ; and the pupils attended each in turn, changing from one to the other at each half-daily session." The pupils all assembled and prepared their lessons in the room with the master. This room usually had a seating capacity of about one hundred and eighty. Originally, all the recitations were conducted in the same room, the master hearing one section of pupils, and the assistants hearing the others.

By the arrangement adopted in the Quincy school, each division was

to occupy a separate room ; and when one reflects upon the old state of harshness in discipline, repression, confusion, and corporal punishment that were necessary, and then upon the quiet, the order, and the kindness of spirit that would be infused into a school under the new system, he will at once understand why it was so important that the new plan should succeed. Then there were the economic reasons, the reasons that were more potent in the minds of many of the school committee at that time than the pedagogic ones.

Mr. Philbrick proved to be the right man for the new scheme. He made it such a success that, in a few years, the old double-headed system had entirely disappeared ; and no more school-houses in Boston have been built on the old plan. Whether the old system would have continued much longer in the event of his failure, it is impossible to say ; but it is quite evident that the better era was much hastened by his wise and efficient administration. The influence of this change is now felt, perhaps, in every State in the Union ; if not in the structure of school-houses, certainly in the mildness of the discipline that has been made possible.

Another great service rendered to the Boston schools, and, indeed, to the schools of the whole country, was the reform in the school programmes. The accomplishing of this, required the highest wisdom and the application of the best common sense. Dr. Philbrick had the good judgment, in this as in many other things, to proceed slowly. Even after he knew the right, he took time to do the work necessary for its introduction.

The making of a good programme is undoubtedly the highest kind of pedagogical work. It is easy to tinker a programme, easy to say, "Put this into the schools, and take that out"; but to know the end of human development, its successive stages, its breadth, the relative proportion of each element to be introduced,—to know the means to be used, the matter to be presented, the order of presentation, the proper proportion of time to give to this or that subject ; and then to be able to state intelligibly all the processes in proper co-ordination and subordination,—in short, to determine just what shall be done, when and how, by the children of a city, so that all shall be educated in the best way,—this requires pedagogical skill of the highest order. It requires educational wisdom of no mean quality to know enough not to attempt the task.

I doubt whether a greater advance in the constructing of a good programme has been made in this country than was made by Mr. Phil-

brick in the arranging of the course of study for the primary and grammar schools of Boston. In speaking of the effect of the programme of the primary schools twenty years after it went into operation, he says, "The adoption of this programme was of so much importance as to constitute an era in the history of the Primary Schools. Its beneficial effects were soon apparent, and they have gone on increasing ever since. It gives definiteness of aim to the teachers which they did not before have, promotes unity and harmony of effort on the part of teachers of different classes, and tends to secure uniformity of progress in corresponding classes in different parts of the city, while it affords at once a standard and guide in making examinations for promotion."

This work of Dr. Philbrick has sometimes been spoken of as though it was, in his mind, an end; or, at least, that school organization was an end, and not a means. Those who make such criticisms fail to take into account, in the first place, the fact that the making of a good programme implies a profound knowledge of education, both philosophic and practical, and in the second place, the fact that, when his programme was made and well applied in the schools under his control, he began to study the ways and means of raising the teachers under his direction to the rank of educational philosophers with as much zeal as he had ever displayed in the construction or introduction of the programme.

It was just at this point that he was misunderstood by his critics. Because he laid a necessary foundation first, and then sought means for erecting the superstructure, it was assumed that he would never build. Shrewdly has Dr. White remarked, "His apparent conservatism was the poise of deep insight and wide knowledge." While others would fail on account of moving too soon, he could wait till all contingencies were provided for.

Another important service rendered by Dr. Philbrick was the making of the grammar masters principals of districts. The primary schools of Boston remained ungraded down to 1856; but between that date and 1864 they had been graded into six classes, and, when practicable, a single class was assigned to each teacher. This arrangement, of course, required promotions to be made every six months, from one primary teacher to another, unless the teachers were sent from grade to grade with their pupils, a plan which was not generally adopted. "This made it necessary that some one should be charged with the responsibility of supervising the group with reference to the admission

of pupils, their proper classification, and their qualifications for promotion, from class to class, and to the grammar schools."

At the same time, the number of pupils in each of the grammar schools had become so much larger under the "single-headed" organization, that an improvement in the supervision of the lower classes had come to be felt as a necessity. The master was occupied in teaching the first class; and consequently the labors of the subordinate teachers were often undirected, or misdirected, and, consequently, conflicting in their aims. This laid the foundation for "high pressure" in the first class; for the pupils often came up poorly qualified to do the work required. And the more the master tried to remedy the deficiency in his own class, the more he was increasing the evil for the succeeding class by neglecting the classes below. And, beside, the pupils who left school without reaching the first class, received little benefit from the superior experience and teaching power of the master.

To remedy all these evils, Dr. Philbrick conceived the plan of relieving the master from the duty of teaching in the first class, and of making him the principal, not only of the grammar school, but of all the primary schools in his district as well. This scheme had the ever potent merit of cheapness; and, after a long discussion, and the support of an able report, it was adopted by the Board. The conservative members, however, succeeded in adding a modification to the original plan, to the effect that the new duty of the master should be performed "under the direction of the district committee." This qualification wrought much harm in some districts for a long time; but in the main the plan soon went into effect.

Nearly ten years later Dr. Philbrick writes, "This measure has unified the whole system and greatly increased its strength and efficiency. Without it the new programme would have proved little better than so much waste paper. Each master is now not merely a teacher of one small class; *he is the training master and real director of all the classes in his district.* If he does his duty, he teaches more or less in every class, to show how they should be handled, and so aids and directs the teachers in carrying out the programmes, that their labor may, as far as possible, contribute to the accomplishment of the desired objects."

But I must hasten on; for time would fail me to treat, with anything like fulness, of all the reforms wrought in the Boston schools, through the wise foresight and patient labor of Dr. Philbrick.

He kept the school expenditures from being reduced to a point that

would cripple the efficiency of the schools. He never boasted of cheap schools. The farthest he ever went in this direction was to show the people that school expenses, in the time of high prices, were not increased so rapidly as other city expenses, and that for the most extravagant use of money for school purposes the school committee were not responsible. But he never so far yielded to the popular clamor for retrenchment as to consent to the reduction of teachers' salaries, or the cheapening of the necessary supplies for the schools. He saw clearly that the schools must cost money, if they were to be good; and his motto was, "Schools good enough for the rich are poor enough for the poor." If the public schools are patronized by the wealthy, they are economical even for them; and so Mr. Philbrick sought to make the public schools better than it is possible to make private schools.

His wise councils were felt in the construction of school-houses. Mr. George A. Clough, the able architect of the Latin and English High School building in Boston, says, "The earliest impressions that I received upon school architecture were from Dr. Philbrick, as far back as 1871; and, now, after fifteen years' experience, I have had an opportunity to see that his views were far in advance of all other writers upon the subject in this country. In reviewing my experience, I find myself constantly associated with the early views of Dr. Philbrick."

In the matter of school furniture such a change was wrought under his administration that the effect has been felt all over this country, and even in other countries. To his wisdom are we, perhaps, mainly indebted for the use of a single desk for every scholar, from the primary school to the high.

He was among the first—perhaps the very first—of the leading educators of the country to perceive the value of art education, and to take steps towards its promotion. Mr. John S. Clark, of the firm of Prang & Co., a man as well qualified to speak upon this point as any man in the United States, says: "The movement for the study of drawing in the public schools had its beginning in Boston. I do not think I do injustice to the many gentlemen who took a deep interest in starting the movement in Massachusetts, when I say that the leading spirit in the movement was Dr. Philbrick. In my various consultations with him, he surprised me, not only by the thoroughness of his observation of what had been done abroad, but also by his clear comprehension of what was necessary to be done here before any success could be expected. To Dr. Philbrick more than to any other one person are

we indebted for our Massachusetts Normal Art School. It was through his instrumentality, mainly, that Mr. Walter Smith was induced to come to Boston in 1872." And I may add that the influence of this movement upon the industrial productions and upon the artistic tastes of the people of this country, is beyond computation.

In the department of vocal music, great progress was made during Dr. Philbrick's administration. When he took charge of the schools, in 1856, singing was indifferently taught in only a portion of the classes of the grammar schools, and in these it was not taught by the regular teachers. In fact "there was no prescribed programme of instruction, no harmony of methods, no uniformity of text-books, no classification, in fact no system." At the close of his connection with the schools, a thorough, systematic, and progressive course of musical instruction was given to all the pupils, beginning with the youngest on their entrance into school, and ending with the last year of the high school course. And there was also a systematic course of instruction given to the pupils of the normal school to qualify the students to teach music, when they should be called to take charge of classes as teachers.

Dr. Philbrick, as long ago as 1860, took strong ground in favor of the introduction of physical training, or gymnastics, into the public schools. After much opposition, the plan that he proposed in 1860, was adopted in 1864, and a special teacher of vocal and physical culture was appointed. Not so much has been accomplished in this department in Boston as is needed, on account of our lack of facilities. The difficulty of improvement in this branch of instruction is a good illustration of the conservative force of an established order of things. To make physical culture really effective, a gymnasium is necessary in connection with each school; and in Boston the school-houses are so situated that the acquisition of ground for suitable buildings would be very expensive; and so even those who are wise enough to see the need of such buildings, hesitate to move in the matter.

The plan at present in operation in Boston of employing a force of truant officers by the school committee was developed during Dr. Philbrick's administration. At first, truant officers were appointed by the mayor and aldermen, and were not responsible to the school committee for the performance of their duty. They for a long time met the superintendent once a month as a matter of courtesy, but not as a duty. At last the authority to appoint these officers and fix their salaries was conferred upon the school committee, by general statute; and then they met the superintendent once a week for consultation and direction.

After this system had been developed and perfected by a series of experiments in Boston, its beneficial effects were so marked that it attracted the attention of other American cities, and finally produced much effect in England and other foreign countries. The action of the truant force in Boston was so moulded by the superintendent, that the moral influence of the officers in promoting a better state of feeling towards the schools, among ignorant parents, and thus securing greater regularity of attendance, was, perhaps, quite as great as that of their direct, legally required work.

Outside the public schools Dr. Philbrick's influence was constantly felt for good. He was a member of the association that secured the charter of the Massachusetts Institute of Technology. From the day of the chartering of this institution to the day of his own death, he was a member of the corporation and of the committee on instruction. He was a constant attendant of the meetings, both of the corporation and of the committees to which he belonged, and by his labors and counsel did much to develop this important institution.

He was no inconsiderable factor in the forces that created the Boston Museum of Fine Arts. He was the first temporary secretary of this association, and did much to secure the necessary funds for its establishment. Many of those who listen to me to-day will remember his personal influence in this direction.

His last work for Boston, as well as for the rest of the country, was his great argument in favor of a permanent tenure of office for teachers. His lecture upon this subject before the American Institute of Instruction, and his masterly treatment of the same in his report to the Commissioner of Education upon city school systems, did much toward securing the passage of the act by the Legislature last winter, which confers upon school committees authority to dispense with annual re-election of teachers,—a movement which, in the opinion of Dr. Philbrick, is second to no reform in education that has been inaugurated in this country.

But were I called upon to single out from all the grand achievements of Dr. Philbrick in Boston, the one more potent than all the rest, the one stronger and more far-reaching in its influence than all others, the one that has done most to make the Boston schools known and honored wherever public schools exist in the whole world, the one that is destined, unless destroyed by narrowness and jealousy, to exert the strongest influence in the improvement of our schools in the future, I should name, not school-houses, not school-furnishings,

not programmes, not methods, not special schools, not even the diffusion of a sound philosophical spirit, but rather the creation of a higher ideal of the schoolmaster's office,—an ideal that makes the office respected and honored by the people, and that makes the school itself the master's pride and glory, and the object of his entire consecration and devotion. This was the crowning glory of Dr. Philbrick's work in Boston.

One of the fundamental philosophical principles that was early developed in Dr. Philbrick's mind, and that became a guiding force in many of his reforms, was the truth that specialized functions require specialized agencies. So soon as it became evident to him that there was a special work to be done, he at once began to cast about for the proper agency for its accomplishment. Hence we find growing up in Boston under his wise guidance, and developing under his fostering care, evening elementary schools, evening high schools, evening drawing schools, schools for licensed minors, a deaf-mute school, in addition to the regular primary, grammar, and high schools. The same principle, also, held him as a firm advocate of the establishment of a separate Latin school for girls, instead of having the work of fitting girls for college done in the regular high school for girls, where the chief business is giving a general education.

The application of this principle compelled him to take ground in favor of a separate and distinct normal school. He saw, with the insight of a sage, that the work of preparing young women to become teachers in primary and grammar schools was, in its finishing process, entirely distinct from the general work of developing scientific and literary power; and, therefore, as he believed, a special agency should be employed for performing this special work. I remember well a visit to the Boston Normal School by the superintendent of schools of New York, Mr. Kiddle, soon after the separation of the Normal School from the Girls' High. We were then just struggling into existence; but after witnessing the work of the school for some time, he remarked, "You have the right organization,—a special school for special work."

And yet this is only a single instance of the profoundly philosophic mould of Dr. Philbrick's mind. He told me, within a few years of his death, that he had never written a sentence on education that he would wish to blot. It is remarkable to observe what unity and consistency run through all his writings. The reason of this is obvious to those who know the deep principles that ran through all

his educational thinking and unified all his educational work. Dr. Harris well expressed this fact when he said, "His annual reports were luminous with insight into the relations of practical methods to the history of pedagogy. He was a city set upon a hill. He never wrote a paragraph without considering the relation of its doctrine to the theory and practice of the world."

The ability to do this implies what we all concede, that he was profoundly versed in educational history. Some have attempted to separate a knowledge of educational philosophy from that of educational practice, and to attribute to him the latter, but to deny him the former. But those who so estimate the man know him only in part. He was, indeed, deeply read in systems of school organization; but these systems lay in his mind as the development of corresponding philosophies. He was strong as a practical school man, but the secret of his practical strength lay in his profound knowledge of the principles that determine right practice.

This made him conservative. While others were ready to embrace a newly presented theory or method, he felt compelled to hesitate. He must first consider whether it had not already been properly tested and rejected, and whether or not it was in accordance with those principles that he held as fundamental. Often would he reject a method of teaching which, for the time being, was popular, well knowing that it was not in accordance with the views of the wisest educators. If any new, really new method was proposed, he always inquired, before he accepted it, whether it was in accordance with the tendency of the best practice of the world. But few men could apply this test. He had the necessary knowledge, and it gave him great strength. He was so well versed in pedagogical history that he knew what the various nations of the world had formerly done, what they were now doing, and the changes both in theory and practice through which they were going. And he judged that if all the most enlightened nations of the world were moving in a given direction, that direction, while not necessarily absolutely right, was more likely to be right than any course that would be thought out by one single mind. How many times I have heard him say, "This practice is wrong, because it is contrary to the unanimous opinion of the wisest educators." This test he often applied with wonderful skill.

It has been said of him that he was not a great man. But what is the standard of greatness? This is a relative term, of course. No one talent of his overshadowed all the rest; but his mind was well

rounded and evenly balanced, and one of remarkable force. His power of application was wonderful. His classmate, Rev. Dr. Spalding, says of him, "No man in college was more noted for his indefatigable industry." And the habit thus early formed clung to him till the day of his death. His judgment of men was excellent, and his opinion of the best means to secure a desired end was rarely wrong. His view of a broad truth was clear, to a degree attained by but few; and his power to apply general principles to special cases was equal to his power of insight. If greatness be judged by success, we must accord it to him in no small degree. Few men of a generation impress themselves upon the world so strongly or so widely. Probably no school man lives to-day who is so widely and so favorably known as was Dr. Philbrick at the time of his death.

Not only the esteem in which he was held by educators, but the affection they felt for him, was unusual. What is the secret? Is it not to be found partly in the fact that his highest ambition was to be of real service to mankind? In the seclusion and sacredness of his own study, July 9, 1865, he wrote, "I often urge as the chief end of man, self-culture with the view to use talents and acquirements for the benefit of others. I got a glimpse of this great idea while in college, I know not how, and it grew and expanded till it came to be my guiding principle. It was this which at length determined my choice of a profession. I felt that the educational field was that in which I could best develop my own character and at the same time do the most good to mankind. I expected labor and trials; but these are necessary for culture. I have no regret on account of my choice; I only regret that I have not *done* more. Not but that I have worked hard enough, but I have not always worked to the best advantage. To accomplish great things, one must have great power of endurance and also great wisdom to direct his efforts, so that he may always work to the best advantage." The desire to do the most good to mankind determined the choice of his profession! Have we not here the key to that cheerful and unruffled patience with which he continually worked, to his catholic charity towards those who delayed the accomplishment of his cherished plans, and to that sweet spirit of Christian forgiveness of his enemies that made him so lovable in the quiet retirement of his later years? How constantly he was guided by this principle, those know best who knew him most. In his view, education was a high and holy calling, worthy of the ambition of the noblest minds, and to this he consecrated his life.

His integrity never faltered. Honesty, both intellectual and moral, was a native element of his character. Selfish aims and ambitions found no lodgment in his heart. He preferred failure to insincerity.

Then he was generous and sympathetic. No man was quicker to detect merit in others, or more ready to give credit where it was due. How many have been cheered by his kind words of sympathy and his wise counsels. He was a real friend to all who were honestly working for the good of public schools.

Able and industrious, devoted to his profession, and a student of its history and philosophy, sincere, generous and sympathetic, patient and forgiving, his life was a grand success. Wherever public schools exist, his influence is felt; wherever popular education is studied, he is known. His mind was clear and strong; his character was round and full and sweet; and his life contributed abundantly to the good of mankind. Long may his memory live in our heart of hearts; and long may his noble example inspire us to emulate his virtues, and to consecrate ourselves, head and heart, soul and body, to the great work to which he devoted his life.

PROCEEDINGS

AND

ADDRESSES

OF THE

DEPARTMENT OF SUPERINTENDENCE.

DEPARTMENT OF SUPERINTENDENCE.

TOPEKA, KANSAS.

According to previous announcement, the Department of Superintendence met at the Presbyterian Church, July 13, 1886, and was called to order by Hon. Warren Easton, President. Owing to the absence of Mr. J. R. Preston and Mr. J. W. Holcombe, who were to read papers, the meeting was adjourned to meet at 2.30, the 16th instant, in the City Building. Before adjournment of this meeting, the president, on motion, appointed Hon. LeRoy D. Brown, of Ohio, Joseph G. Schofield, of Kansas, and Hon. Joseph O'Connor, of California, a committee on nomination of officers for the ensuing year.

City Building, Topeka, Kansas.

Department met pursuant to adjournment and was called to order by President Easton.

Reports of committees being called, Hon. LeRoy D. Brown, of Ohio, chairman of committee on nomination of officers, reported as follows:

For President, Hon. Charles S. Young of Nevada; for Vice President, Prof. N. C. Dougherty, of Illinois; for Secretary, Charles C. Davidson, of Ohio. On motion, the report was received and a vote taken, which resulted in the election of the above.

On announcing the result of the election, Dr. Thompson, of the Ohio State Central Normal School, and State Commissioner Brown, of Ohio, were appointed a committee to escort the President and Vice President elect into the meeting. President Easton, in a few happy remarks, introduced the newly elected President of the Department. In response, Mr. Young spoke as follows:

Mr. President and Members of the Department of Superintendence:

The hope of this country is the public free school. In charge of the interests of the free school are the State, County, and City Superintendents. Theirs is a mission fraught with questions of greater national concern and of more vital importance than any other in the field of education. This organization, known as the Department of Superintendence, represents more than 300,000 teachers of the youths in a population of 50,000,000 of people. In effecting state and national school legislation, in moulding state and city school systems, the Superintendents are the people's chosen agents.

I take it that to be elected President of an organization of such magnitude and of such momentous interests as this, cannot be considered other than a distinguished honor. In selecting your presiding officer for next year you, representing the more populous states on the Atlantic Coast, have extended westward across the Continent the right hand of fraternal friendship to compliment a state of but 50,000 people. I would not have you unmindful that I appreciate the honor thus paid to the school system of Nevada, one of the youngest of the States, as well as this compliment paid to myself, its chief school officer.

Many of you are more familiar than I with the needs of the Department, know better than I what are the objects it should accomplish. To you, educators of the East and South Southwest, I shall look for counsel. In the coming meeting to be held in Washington in February next, I ask your earnest co-operation. Members of the Department, again I thank you for the honor of having been made your President.

The following papers were then presented :

County Superintendents—Their Relations and Duties to Teachers, by Hon. E. B. McElroy, of Oregon.

Teachers' Institutes, by Hon. D. C. Tillotson, of Kansas.

After which the Department adjourned to meet in the City of Washington, D. C., sometime during the coming winter.

CHARLES C. DAVIDSON, Secretary,
Alliance, Ohio.

COUNTY SUPERINTENDENTS.—THEIR RELATIONS AND DUTIES TO TEACHERS.

BY E. B. MCELROY, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, OREGON.

HISTORY.

The office of County Superintendent was created in Oregon by act of the Legislative Assembly, Oct. 29, 1872. At the same time the office of Superintendent of Public Instruction was detached from that of Governor, and became a separate and distinct office. At that date, it may be said, the Oregon school system was projected and formulated. It is yet in a formative condition. The scheme of duties then prescribed for the County Superintendents was as follows :—

1. He was required to lay off his county into convenient school districts.
2. To make records of the same.
3. To superintend and assist in the erection and establishment thereof.
4. To apportion the school funds received from all sources to the several districts.
5. To draw orders in favor of district officers.
6. To keep accounts with the County Treasurer and the District Clerks.
7. To select, locate, and appraise school lands.
8. To supervise and care for the same.
9. To examine applicants to teach.
10. To distribute blanks, school laws, etc., to school officers.
11. To hold public examinations quarterly.
12. To visit schools annually.
13. To receive, examine, and file reports made quarterly by teachers.
14. To receive, examine, and file reports from District Clerks, annually.
15. To make an annual finance exhibit to the County Commissioners.
16. To make an annual report to the Superintendent of Public Instruction.

COMPENSATION.

For all of this work he received at that day the *magnificent average salary of one hundred and fifty dollars per annum*, said sum payable at

the *option* of the County Court. This option was one of the unknown quantities that disturbed the dreams of the then superintendent, and was mitigated in no degree by the reflection that if any one of the sixteen enumerated duties should be in any manner neglected, this "dereliction and malfeasance of office" should be promptly punished by a good round fine of one hundred dollars, and if this pecuniary reminder should prove insufficient to check his reckless carelessness, he was to be summarily dismissed from his "high and *lucrative*" position. It is but justice to state that history does not record a single fine during the first decade—probably for the reason that no superintendent could be found whose assets would meet such weighty strain.

QUALIFICATIONS.

The office of County Superintendent is one of the most important in our public school system. His duties are numerous and often onerous in many ways only familiar to those who have had experience in this work. It follows, therefore, that he should be a person of native ability, scholarly attainments, and of sound moral character. If, in addition to these requirements, he has had some years' experience in the schoolroom as a successful and practical teacher, it may be said that he possesses about all the necessary qualifications that can be reasonably demanded of one who is to administer the school affairs of a county.

The successful organization of a system of county schools requires an active, able, and efficient leader. The County Superintendent may, by some imprudent or ill-advised step, work disaster in his school districts, and he should therefore be a person of comprehensive views and good judgment, able to grapple with and adjust the complicated questions frequently arising.

The importance of the work may be seen from several standpoints:—

The Superintendent's influence in shaping and directing the usefulness of teachers and pupils; his power to license teachers; his responsibility as a school visitor, are some of the prominent duties of the office demanding our attention. The energetic Superintendent may do great good by visiting his schools, especially if he has the work at heart and loves to encourage the teachers and children more than he loves his salary. And, from this point of view, we must award the greatest philanthropy and disinterested motives to our Superintendents in Oregon, for, in many instances, after deducting the expense of school visits from their salary, they find nothing left. And here we are reminded that the word *salary* formerly meant *salt*; it still has that significance to several "Web-foot" Superintendents,—they barely save their salt.

If, then, the Superintendent visits his school in the right spirit,—not with the determination of impinging his own special plans of instruction

and methods of class-work upon the school, nor yet to criticise and openly complain of the work being done by the teacher (this should be done privately)—but he should enter the schoolroom, recognizing the teacher's right, power, and authority there; remembering that while the teacher may have poor methods of instruction and may be limited in experience, still the special condition and wants of the school are generally understood by the teacher, better than any one else. And here is required prudent action on the part of the Superintendent, lest he embarrass both teacher and pupils by indiscreet criticism and unwise strictures. He should not lessen his influence and usefulness as an officer by meddling in matters that do not concern him; nor should he visit the school in a prying and inquisitive spirit, determined to find out all the minor difficulties usually existing in every school; but he should enter the schoolroom in a frank, sincere, straightforward manner, showing himself equally ready to appreciate and commend success as to criticise failures. The value of school visits to the Superintendent in acquiring a personal knowledge of the processes of teaching, the ability of the teachers, and the general condition of the schools, cannot be overestimated.

During these visits he may collect statistics that can be secured in no other way, and he may gather a fund of useful information from teachers, district clerks, and directors which will enable him to map out and develop the school policy of the county so as to secure the best possible results.

There are other duties that deserve mention, such as the organization of districts, examination of teachers, the investigation and decision of many intricate problems, arising out of the uncertain construction of the school law, etc., but the limits of this paper forbid the discussion of each and every important factor of these questions.

When the time comes (as it will come) that these officers shall receive a good salary for their laborious and responsible work, enabling them to devote their entire time to the duties of the office, then the statute scheme of duties already outlined will necessarily need revision and some extension.

Below is presented a synopsis of duties that would ordinarily be sufficient when the office of County Superintendent (in any school system) is made self-supporting and at its full working capacity.

SCHEDULE OF REQUIREMENTS FOR THE OFFICE OF COUNTY SUPERINTENDENT.

1. He should be a practical teacher.
2. He should be elected by School Directors in convention assembled.
3. The minimum term of office should be four years.
4. He should hold county and township Institutes.
5. He should hear, examine, and decide appeals from district officers and teachers.

6. He should arrange a course of study for county schools.
7. He should make general rules and regulations for the government of his school officers and teachers.
8. He should have an advisory power in the location of schoolhouses and in the selection of teachers.
9. He should erect and establish school districts.
10. He should apportion all school moneys.
11. He should examine applicants to teach.
12. He should visit all schools.
13. He should distribute all blanks and other supplies.
14. He should receive, examine, and file school reports of all classes.
15. He should make and publish an annual financial exhibit.
16. He should make an annual report to the Superintendent of public Instruction.

THE SUPERINTENDENT'S RELATION TO HIS TEACHERS.

The duties of his office in this respect are threefold: That of guardian, friend, and counsellor.

The secret of the success secured by many County Superintendents in their work rests, principally, in this: first,—He keeps himself fully advised as to the wants of his several school districts in the matter of teachers, and especially as to the changes made in their teaching force, from time to time, and the causes therefor; and, in the second place, he is personally conversant with the *status* of each teacher.

Again, as he is the legal supervisor and general director of all school matters and questions in his county, issuing all licenses and permits to teach, visiting schools, etc., he is, from the beginning, necessarily brought into closer relationship with the teacher, than any other officer.

It is important first, then, that this relationship be not disturbed by the Superintendent by arbitrary action or decision at the examination for certificates. The full rights and benefits of the examination (of whatever kind prescribed by law) should be impartially and in all reasonable respects extended to every teacher. Instances are recorded where the Superintendent, through *pique* or *personal dislike* on the one hand, or through *special preference* on the other, has distorted and permanently injured his influence in the county at large, by glaring and gross partiality. Accidental errors may occur here in the best regulated school systems and with the most careful superintendents; if so, honest, straightforward action at once sets the matter at rest. Here it is that his relation as guardian begins, nor does it end here, but he continues to make his office an active agency in promoting and elevating the standard of his schools by exerting an intelligent supervision of, and influence upon, his

teachers, not only at the very commencement when he determines their character and fitness to instruct by issuing licenses to teach, but this guardianship should be maintained by constant attention to the quality of work done by the teachers in the schoolroom, and with persistent, systematic effort, aim to elevate and enlarge the usefulness and excellence of his teachers by increasing and developing their qualifications, thus determining the character and quality of their schools and stimulating and increasing their powers as instructors.

Again, the teacher should look to the Superintendent as a *friend* in whom he can trust, and as a *counsellor* whose advice should be received and followed. This reliance should never be misplaced. Especially does this apply to young teachers.

For the most part those who enter the profession of teaching have not attained their majority in years. The noble army of men and women who compose the teaching force of America to-day, had to commence some time and usually they commenced quite young. Young boys and girls pass the required examination intelligently and creditably, often receiving certificates of high grade, and, with the assurance naturally resulting from the success of this first public examination, they are ambitious to enter the schoolroom at once.

Although these young persons possess all the necessary educational qualifications to teach any ordinary ungraded school, yet they have but little knowledge of the real duties of the teacher, and still less of his responsibilities.

Almost wholly inexperienced in the practical affairs of life, having but little knowledge of the laws of mind and its development, they are not fully prepared to take charge of a school. They may be fresh from college, academy, or normal school, graduating with highest honors in their classes; yet they may still lack self-control, self-reliance, observation, and other elements of character necessary to success as teachers.

To *advise* these young aspirants is a privilege that will not be neglected by any earnest, conscientious superintendent.

This is one of his plain prerogatives that should always be exercised, for it is not enough that the Superintendent is satisfied with the examination passed; the position he occupies demands that he shall volunteer such counsel and instruction as may be deemed expedient.

This privilege becomes still more apparent when we consider that the Superintendent is largely responsible for the success of the schools, in that he is the sole judge of the competency and fitness of the teachers. It is to be regretted that neglect or carelessness should ever exist in this direction, and he who manifests a total indifference and apathy in the duty of advising with his teachers, is utterly unworthy of the position he occupies.

It does not follow that the Superintendent is always answerable for incompetent teachers, who sometimes pass examinations and secure schools. The argument here is "that he should never waive the responsibility nor neglect the opportunity of encouraging the deserving teacher (whatever his attainments), and not forgetting that it is equally incumbent to criticise the worthless and indifferent teacher to final reconstruction, and, should this fail, then to final extinction."

THE SUPERINTENDENT'S DUTIES TO HIS TEACHERS.

The history of the formation and development of every public school system in the United States shows that the success of each system has depended largely upon the labors of a very few men and their chosen auxiliaries. What is true of each State school system is also true, in some respects, when applied to a single county. To successfully develop and methodize a scheme of county schools, requires an efficient and vigorous system of supervision. If then, the county superintendent is a man capable of grasping and arranging a system of schools, if he is a man of energy and force of character, he will take a careful and comprehensive view of the system in general and especially note the details of the work. Among the several departments of general supervision, there is no division of his work, more important to the superintendent, than the *duties he owes to his teachers*, and, since it is generally expected (by the school patrons) that he shall, from time to time, secure a corps of teachers whose instruction and discipline are of the highest order, and, however unreasonable these demands may be on the part of the general public, nevertheless he is made to feel a personal responsibility in the examination and licensing of teachers.

Without stopping here to discuss the question whether or not he should be made amenable in this function of his office, it appears, in practice, that he cannot avoid assuming some responsibility at this point of service, and thus he should have the good sense to see that he has a direct personal interest in the success of each teacher and should, therefore, be the more attentive to the duties he owes to them, even to the minutest details.

It is deemed unnecessary to mention each and every duty arising, or that may arise in this connection. The major ones only need be taken up and these may be suggestive in turn of others which every careful superintendent will note and practice in the effort to secure that order and system which should prevail in every school. And first, as to

INSTITUTE WORK.

It is the duty of the superintendent to give an impetus to county

Institute work by awakening a professional spirit in his teachers and constantly impressing upon them the value of the methods and suggestions received at these meetings. To secure the best results in the Institute there must be cordial co-operation of the superintendent and teachers.

MORAL TRAINING.

The superintendent should impress upon his teachers this lesson : that the development of mind and muscle is not his only work in the school-room, but this training must be supplemented by constant and proper *moral* teaching, preparing the child upon a broad basis of truth and virtue, for the ultimate responsibilities of life.

IRREGULARITY OF ATTENDANCE.

The efficiency and thoroughness of the best instruction is frequently marred by irregular attendance. Especially does this prevail in our rural districts. Many obstacles are constantly arising in these districts which the most skillful teacher cannot control or foresee ; and the direct loss to the school may be noted in many ways ; the results of the quarterly and monthly examinations are deficient and unsatisfactory, and the reputation of teacher and school suffers proportionately. Again, the time of the teacher is frittered away in making the daily record of the absence ; in requiring and filing excuses, and in the investigation of the same. The time required for this is an absolute waste, and the pupils who are prompt in their attendance and classes, are thus deprived of the time and instruction of the teacher, and quickly lose all interest in their studies. The habit of irregularity soon degenerates into that of downright truancy, and its immediate effect upon the school is seen in the growing insubordination and reckless behavior of those who are usually prompt. The regulations and discipline of the most judicious and capable teacher are often taxed to the utmost to control the lawless acts of truants, and the injurious influences of irregular attendance.

Here it is that the kind offices of the conscientious Superintendent are applied in advising and assisting the teacher in enforcing discipline and correcting the vicious habits of pupils. He quietly counsels with teachers and patrons, privately admonishes unruly children, and soon the good fruits of his labors are seen in a renewed obedience to the rules of the school, and the cheerful labors of teacher and pupil bespeak a greater efficiency and final success.

SOCIAL FEATURES.

The teacher should be instructed that his social powers should be improved and cultivated, so that his influence for good may be felt in the home circle, as well as in the schoolroom. He should be taught persistency of purpose, not only in moulding the manners and morals of his pupils, but also that something may be done in this direction for the community, and that this course will tend to secure the co-operation and interest of the patrons and the hearty support of the school officers.

CRITICISMS.

The tendency of many "weak" teachers is to expose their incompetency at the very beginning, by a kind of carping criticism of their predecessors' imaginary failings,—not only this, but they immediately turn their attention to the textbooks in use and harshly censure their authors, the subject matter, the arrangement, etc. The superintendent has a difficult task here, still he should not hesitate to teach these pedantic egotists that it is but a step from the teacher's criticism of predecessor and textbooks to a more severe criticism by pupil and patron of the teacher himself. It will require no ordinary effort to suppress these self-conceited censors, but the superintendent should be equal to the emergency. There is not the slightest necessity in such cases for reserve on his part, neither should he seek for special pretexts; but on the contrary, the most emphatic and absolute frankness will materially assist him in relegating these self-styled "educators" to the plow-handle or corn-shock, or some other equally useful occupation in private life.

FOSSILS.

There are a few teachers of many years' experience in the schoolroom who are gradually growing into stereotyped methods and ruts. These now are rather "keeping school" than teaching school. Each member of this class confines himself strictly to his own plans and ideas, as if *his* may be (Squeers like) the one only school in the world. Teachers' Institutes and school journals are held in great contempt. Perhaps, unless a "spelling bee" or "corn husking" chance to bring them together, he never meets his fellow teachers (of like habits) in the adjacent districts, and, when they accidentally do meet, it is only to exchange a surly salutation, and then they immediately retire to their respective burrows, where, under the seductive influence of a "corn-cob pipe siesta," they meditate and dream in peace and quietude upon the hermetical bachelorism of Mr. Pickwick.

Left to the cogitations of his own mind, he wraps himself up in his own ideas, beyond the sacred confines of which he never attempts to venture. Do his ideas chance to be right, so much the better for the school; do they not, so much the worse. Such as they are he intends they shall remain, and, therefore, guards them with zealous care.

No patron or pupil dares to molest him in the citadel of his self-opinion or ventures to inquire into the methods he has adopted, so he is left alone in his own glory.

It is expected of the active Superintendent that he will entice this *fossil* from his den and lead him out into the broad daylight of thought and action, and into the field of investigation—to cultivate in him a spirit of social friendship and to introduce him to other members of his profession, and to excite between them a feeling of sympathy and common interest that should ever be found existing between co-laborers in the same cause.

And now without adverting farther to other duties of equal, if not greater importance, to Superintendents and teachers, this paper may be closed with the remark, that the Superintendent is largely responsible for the success or failure of his schools, and for the relative fitness of the teachers selected for their management.

The zealous, devoted Superintendent, wherever he is, or under whatever circumstances he may labor, will go forward with that "*persistence of purpose*" (elsewhere mentioned) to build up a school system of power and thoroughness, arranging its steps in such order that its laws and principles may be easily seen and adopted, and that its ultimate purpose shall be to lead the minds of teachers and pupils, up to independent thought and investigation; and, beginning with the elements of knowledge, shall end with the acquired force of *thinking*, and *thinking* to definite and absolute results. Let him not be satisfied with anything short of a thorough, genuine, mental development, realizing that if he plant the seed in fertile soil, the harvest will never fail.

TEACHERS' INSTITUTES.

BY HON. D. C. TILLOTSON, SUPERINTENDENT OF SCHOOLS, TOPEKA,
KANSAS.

I. The teacher has to do with the phase of civilization in which he labors. His work is limited by its requirements.

The present phase of civilization consists of three elements—the social, the political, and the religious. The social element finds expression in the family and civil society; the political element finds expression in the state; and the religious element finds expression in the various forms of worship. Each of these acts and reacts upon the others and itself, creating and eliminating or perpetuating wants and the means of supplying them.

Each family cannot produce the articles it consumes, and in the course of ages barter rises to the dignity of commerce. Each family cannot cure the ills it inherits and acquires and the grandam's simples make way for the science of medicine. The administration of justice has become such an elaborate machine that the profession of the law finds profit and honor at her bar. The complex conditions of living require much preparation to fit the individual for the duties and responsibilities of life. This preparation includes both secular and religious instruction. The family not being qualified to give this instruction, two classes of teachers are required—the school teacher and the preacher. The duty of each is to supplement the efforts of the family,—in no sense to usurp its functions. If the family was capable of fitting its members for all the duties of life, the services of the school teacher and of the preacher could be dispensed with. Hence, instruction should be given in those subjects in which the family is least capable of giving instruction; and the lower the typical family, the nearer it comes to being absorbed into civil society, the greater the dependence upon those engaged in instruction. The student of history is deeply impressed with the position the family has held in different ages and countries. At present the supremacy and importance of the family is recognized among the Germanic races more fully than among any others. The integrity of the family is jealously guarded by all English speaking people, especially by those most deeply imbued with our household wisdom. This makes it the duty of all those engaged in instruction to emphasize the fact that the family is the most important

element of our civilization. The highest family type is that which most nearly fits its members for the duties of life, the lowest that which does the least to fit its members for the duties of life. The special function of the teaching profession is to develop and perpetuate the highest family type.

If my premises are correct, the person who undertakes the work of a teacher should be a student of home life. He should particularly observe the subjects of instruction in the family and the methods used. Rousseau and Froebel acquired renown and have done much good by studying the simple manners of the common people. This is the field white for the harvest.

II. Each profession requires of its members special preparation to accomplish a special work. This preparation should be made before entering the profession. In the United States, the remuneration is so small, and the tenure of office so uncertain, that the body of our teachers are of immature years and attempt to prepare themselves for the duties of their profession after beginning its work.

This creates a demand for the normal school and the teachers' institute, and the duty of the profession, that of supplementing home efforts, indicates what should be expected of them. The want of special training is in a measure supplied by the instruction in the common school, under competent teachers. Those who have received such instruction are not wholly unprepared for teaching.

The teachers' institute derives special value from the fact that it may reach every community in the country. Each state must be the judge of what is required to make up for previous training on the part of those engaged in teaching. The wants of one county or city will differ in some degree from every other county or city. Hence, exact uniformity in the organization and work of teachers' institutes is not only unnecessary, but undesirable.

By training I do not mean the acquirement of a stock of clever drill devices alone, but the acquisition of habits of thought which will enable the teacher to work along those lines of effort in harmony with the wants of the community, and of a creditable stock of "book learning."

III. The institute is the measure of the want of training, also the measure of the mental activity of the teachers of a given community. Its function is a dual one,—to accomplish certain things for the teachers themselves and to accomplish certain things for the community at large rather for each of the families forming the community. As to themselves we may observe,—

1. The interchange of opinions among those engaged in any calling is always recognized as of great value. As one diamond is polished by another, so one mind is quickened by contact with another.

2. Every teacher should be well informed as to the principles of instruction and control. The institute gives an opportunity to extend our information. If judiciously managed it gives the opportunity "to weed out" patent methods and other excrescences that develop in the profession.

How does the child acquire information? and how does it reach conclusions? He who pays attention to any subject will learn. How can we command the attention? He who repeats or intensifies the impression upon the mind made by attention will remember. How can we secure the repetition or intensify the impression? Those who learn and remember will reason as naturally as they breathe. How can we direct the mind in reasoning so it will accept the true and reject the false? Here is food for reflection for many days.

We have heard much of school government, but very little of the principles of control. In every community there are leaders both among children and adults, a leadership recognized and accepted. What constitutes the elements of leadership? One schoolgirl aspiring to be a teacher, demurely enters the schoolroom and reigns a queen. Another fails to command either the confidence or respect of her pupils. Why the success of the one and failure of the other? What better place than the institute to consider these questions?

3. The social advantages of the institute should not be neglected. Persons in the same calling with similar tastes and habits of thought can here enjoy a brief respite from the isolation of the schoolroom. It is an opportunity that comes but once a year and should receive the attention it deserves.

4. A large number of our teachers need instruction in academical branches. The institute, in many parts of the country must do something to supply this need. To even attempt a review of academical work requires at the least, several weeks' time. The institute which lasts but a day or two can do nothing in this direction.

5. The educational value of the institute upon the community in which it is held, should receive earnest consideration on the part of those in charge. In many communities we find a settled conviction that teachers are a class of impracticables, full of wild theories and opinionated to the last degree. And teachers sometimes reciprocate the feeling to their own injury. The institute can be made a field in which each can form a more just estimate of the other, in which parents may learn that no profession contains more of self denial, more desire to help their fellows, than that of the teacher, and in which the teacher may learn that parents have but one chief object in life, that of caring for their children. Each may differ from the other as to the best and most appropriate methods of expressing these characteristics; but the acquaintance would cause each to respect the other more.

In not a few instances a series of chance occurrences have estranged the people from the school. The institute gives the opportunity of impressing the fact that the schoolhouse is the help-mate of the home. The teacher is there to work in harmony with the community, not to insist that the community must adjust itself to his notions of propriety and right.

IV. Each state is the judge of the work its institutes should undertake. This finds expression in the laws of the various states and in the regulations of many of our cities.

In those states in which an interchange of opinions and the discussion of principles of teaching is all that is required, short sessions are the rule. Where instruction in methods is required, a longer term is provided for. When instruction in the academical branches is required, a still longer term is provided for.

Twenty-six states recognize teachers' institutes, and provide for their maintenance. Those in which institutes remain in session one week or less, are, Alabama, Arkansas, Florida, California, Indiana, Maryland, Massachusetts, Minnesota, Michigan, New Jersey, New York, Ohio, Rhode Island, Pennsylvania, Vermont, Virginia, West Virginia,—seventeen. Those in which institutes remain in session more than one week are, Illinois, Iowa, Kansas, Nevada, South Carolina, Texas, Nebraska, North Carolina, and Wisconsin,—nine. In sixteen states the institutes are controlled by the state superintendent, in the others by county superintendent. But three states recognize the faculties of the state normals in their scheme of institute work. These are, California, Maryland, and Wisconsin. A study of the practical working of these institutes reveals the fact that the laws governing them in most states are very crude. A study of the work outlined in some states demonstrates that those administering the institutes have not improved on the laws. A "cast iron" course of study means one of two things,—either the authority that prepares the course of study fails to appreciate the various wants of different communities, or those who give instruction in the institutes are poorly prepared for the work they have undertaken. It necessarily reflects upon somebody.

But enough of criticism; the teacher can but keep pace with the progress of civilization; he can hurry it little, if any. In this land of free schools we still measure the intelligence of our people by enumerating the number who can read and write. The teachers are doing much; the institute is one of their modes of progress, and it should receive the profound study of the best thinkers among us. If I have contributed a mite to a better understanding of its functions and importance, I am content.

DISCUSSION.

L. D. Carr of Dakota, said, "Our law provides for a township institute, which convenes one Saturday of each month. Every teacher is required to attend each meeting or lose one day's wages. By combining with this, the work of the Teachers' Association and Reading Circle, I find it a very great assistance in creating a sentiment in favor of institute work and more thorough training. We outline specific work and follow it as closely as possible. My teachers manifest great interest in the work. I have known of ladies walking six miles to a township institute."

PROCEEDINGS
AND
ADDRESSES
OF THE
DEPARTMENT OF HIGHER INSTRUCTION.

DEPARTMENT OF HIGHER INSTRUCTION.

WEDNESDAY AFTERNOON, July 14, 1886.

The Department of Higher Instruction of the National Educational Association met in the Senate Chamber of the State Capitol Building, at 2.30 P. M.

The President of the Department, Dr. Jerome Allen of New York, in the chair.

On motion a committee on nomination of officers for the next year was appointed. The President named Dr. I. W. Andrews of Marietta College, and Prof. S. J. Buck of Iowa College, Iowa, as the committee.

E. J. James of Pennsylvania, the Secretary, being absent, H. H. Freer of Cornell College, Iowa, on the nomination of the committee, was requested to act as Secretary.

The President then read his address. Prof. N. P. Jordan of the University of Minnesota, was then introduced and read his paper "Classics in High Schools." This was followed by the paper of Dr. W. A. Mowry, "The College Curriculum."

A discussion of the papers followed. Remarks were made by J. B. Merwin of St. Louis, President Julius D. Dreher of Roanoke College, Va., Prof. Boltwood of Evanston, Ill., High School, Prof. Rix of Cincinnati, Ohio, Dr. W. A. Stille of St. Louis, Prof. L. Wiener of Kansas City, Dr. George A. Bacon, of Syracuse, N. Y., Dr. George P. Brown of Chicago, Prof. T. H. McBride of Iowa State University, and others.

The time for the next session of the Department was fixed at 2.30 P.M., Friday, July 16, and the Chair announced that the discussion would be continued by President Dreher of Roanoke College, who had made special preparation upon the subject.

The nominating committee, through the chairman, Dr. I. W. Andrews, made the following report, which was adopted.

President — Dr. W. A. Mowry, of Boston.

Vice President — Dr. Peter McVicar, President Washburn College, Kansas.

Member of Executive Committee — Chancellor I. J. Manatt, of Nebraska University.

Secretary — Prof. H. H. Freer, of Cornell College, Iowa.

Adjournment followed report of the Committee.

SECOND SESSION.

2.30 P. M., July 16, 1886.

The Department met pursuant to adjournment, Dr. Jerome Allen in the chair.

The subject "Colleges South and Colleges North" was discussed in a paper by Dr. J. D. Dreher, President of Roanoke College, Va.

Discussion followed, which was engaged in by Prof. Robert Cruikshank of Emporia, Kansas, Isaac C. Dennett, University of Colorado, Dr. Stille of St. Louis, Dr. G. W. Hoss of Baker University, Kansas, and by the principal of the High School, Newark, New Jersey, and others.

On motion of Dr. H. S. Thompson of Otterbein University, Ohio, it was "Resolved that a committee of seven be appointed by the Chair from as many different states, to consider the necessary requisites for admission, and the kind and amount of work which should entitle to the usual college degrees. It shall also be the duty of the Committee to confer with a similar committee from the department of Secondary Instruction, in case such a committee is appointed."

Members of the Committee: Dr. H. A. Thompson, Otterbein University, Ohio; Dr. G. W. Hoss, Baker University, Kansas; Dr. S. H. Peabody, Regent of University of Illinois; Dr. Jerome Allen, New York City; T. H. McBride, State University, Iowa; William Preston Johnston, President Tulane University, Louisiana; Julius D. Dreher, Roanoke College, Virginia.

No other business appearing the Department adjourned.

H. H. FREER,
Secretary.

OPENING ADDRESS.

BY DR. JEROME ALLEN, PRESIDENT.

It has often been assumed that primary methods have no special relation to the universities and colleges. The idea is erroneous from the following particulars :

First — The true principles of education and instruction are fundamental. Upon this fact rests all that we have of the science of education. Two of these principles are : That method of instruction is the best that leads the child to investigate for himself. Education, in its highest and best sense, brings into play and harmonizes actively the whole being, intellectual, moral, and physical. In all good schools the secondary effort is the impartation of knowledge, the primary object is discipline. When the child enters school he is taught to observe, think, and express ; afterwards he learns from books. Nature is the first teacher of the young mind. When the young man enters college he is taught in the same way, if he is taught properly. The study of books can never supplant the study of nature. Thought comes first from what we take in from the world around us, then from books containing thoughts that others have taken in from the same world.

Second — The methods of instruction in the higher schools will always affect the methods in use in the lower schools. The imitation faculty is strong in man, and many have no way of doing but by imitating others. They cannot discriminate or generalize to any great extent. If this college professor assigns lessons from the book to be learned as it is written in the book, the college student will do the same in his elementary school. Is the professor strict in marking each recitation and grading each student according to rank, so will the student do in primary school. It is needless to say teachers ought to be wiser. They are not, and for generations to come they will not be. It proves that college methods should be as nearly perfect as possible for the sake of the weaker brethren in charge of the lower schools.

Third — The studies required in the higher schools affect all the studies in the lower. The Latin and Greek have been thoroughly studied in college, so for generations, Latin and Greek have been also studied in the elementary schools. The effect of this has been most plainly seen in crowding the curriculum with more than could be profitably learned. If

the boy is to go to college, he must early commence to study what the college requires. The question is not here discussed whether Latin and Greek should be required of all college students, or whether the same culture cannot be obtained from the modern languages and sciences. The fact remains that what the colleges study, the lower schools will also study, for it is a law that the higher always affects the lower. When our colleges value the discipline coming from the proper study of chemistry, biology, our lower schools will value them also. .

Fourth — Option in studies in college will lead to more flexibility in the graded and country schools. The question of early adaptation of discipline to the needs of pupils is one of the most important before the educational world. Until recently all our colleges have required their students to study the same branches at the same time, and to the same extent. This has supposed the same capacity in all, for all branches. It made no difference whether the child was slow in some and quick in others, he must be kept back in all until he had mastered the one hardest for him to understand. When our colleges learn to adapt their instruction more completely to the needs of pupils, our lower schools will soon find their way out of the cast iron system.

These are merely hints suggested at the commencement of this session for your consideration. The day of better things is dawning for all our schools. Educational methods are progressive. From the humble Pestalozzi and the unobtrusive Froebel, have come influences that have reconstructed all the universities of Germany. They are destined at no distant period to affect instruction in all the universities of the world.

DIVERSITY OR UNIFORMITY IN COLLEGE REQUIREMENTS.

It is not to be supposed that all colleges should pursue the same course of study, although it is highly desirable that they should reduce their differences to the minimum. Various institutions established in different locations, relying upon diverse constituencies, dependent upon a variety of secondary schools for the preparatory training of their students, necessarily must differ both in their standard of admission and in the thoroughness of the work done, in their several classes. It would be impossible for all the colleges of New England, for example, or for those of Ohio, Indiana, and Illinois, or for those in Iowa and Kansas, to expect precisely the same training of their students prior to admission, or to demand exactly the same amount of study or degree of scholarship at graduation, neither would this in all cases be desirable; but it is believed that the great principles, which have been insisted upon in this paper, can be carried out by most of the colleges of this country. Moreover, it would prove advantageous for all colleges, especially in any particular section of the

country, which receive their students from the same preparatory schools, to agree as far as possible upon a minimum and a maximum standard of admission.

The preparatory schools have found that it is a serious evil for them to be obliged to prepare their students in the same class for different colleges, when the requirements for admission to these various institutions differ so much as has of late years been the case. If these colleges could agree with each other upon a standard of admission which might be denominated minimum, with certain other studies added, wherever it is possible to have them, the gain would be direct and positive, both for the college and the preparatory school.

We are living in an age when the fundamental principles of education are being subjected to a thorough discussion. Some men hold the opinion that the colleges are useless; that the best way to educate a boy is to put him to business at ten or twelve or fourteen years of age; that we may suffer a college here and there to eke out a miserable existence, and unfit a few boys for business life by making of them poor ministers or doctors, but that all the ordinary callings of life are better followed by the young men being obliged to learn their trade or profession by its practice. Possibly these are disciples of the new education, who believe that the way to learn to *do* is by *doing*.

There are others who consider the college as a useful adjunct to society; that it is needful for the education of a limited number of young men for a few special pursuits, such as law, medicine, and divinity.

But we believe that the past history of American colleges has proven beyond a question, that these institutions are of the greatest service in all departments of practical life; that they have been one of the chief causes, directly and indirectly, of the rapid development and elevation of our people, by which this republic has come to take first rank in matters of intelligence, thrift, and enterprise among the nations of the world; directly, by means of their own graduates engaged in active life, and indirectly, by means of the influence of many of these graduates, especially in the ranks of the teachers, upon the minds and lives of others. We believe that the American colleges should be fostered,—that whether they are endowed by private funds, or are State institutions supported by public money, they should be encouraged in every possible way to do their best work. It would not require the inspiration of a prophet to predict, with certainty of fulfillment, that the future will witness a decided advance all along the college line, and that during the next century, the colleges of America will manifest a more rapid growth, a more philosophical method of instruction, a wiser curriculum, and a more extended usefulness.

THE COLLEGE CURRICULUM.

BY WILLIAM A. MOWRY, PH. D., BOSTON, MASS.

The subject which has been assigned to me is so broad that a full discussion of it is impossible, nor is it my intention to present an elaborate paper. I design merely to embody such practical suggestions as seem to me warranted by the present condition of college affairs in this country, and such as I hope may be serviceable to the progress of educational thought.

In discussing the question of a curriculum for colleges, it will be necessary, first, to consider the purpose of the college, or the object for which it is established. I shall restrict the use of the term "college" to what is known as the typical American College. In order to understand thoroughly the province of the American College, it may be well for us to remember that it had its origin as an offshoot from the English College. Our system of education in America is principally derived from England, rather than from Germany, or elsewhere upon the continent of Europe; hence the educational methods of America have always been more English than German or French. The German Real Schulen, Gymnasias, and Universities present a system of education distinctly German. The ancient Public schools or Grammar schools, the Colleges and the Universities of England form the English system, which dates back about 600 years. The first college at Cambridge,—St. Peter's College, or Peterhouse,—was founded in the year 1257. Five other colleges at Cambridge were established before the year 1400; four others in the next century, and half a dozen more before the Pilgrims landed at Plymouth. The establishments at Oxford date from about the same time.

ORIGIN OF THE AMERICAN COLLEGE.

The American system may be said to have been begun in Massachusetts, where, at a very early period were established, first, a college, which was the beginning of the present Harvard University, the oldest college in America; then the Grammar schools which were to prepare young men for the college course of study, and subsequently the common school system. It is well worth our notice that from the very foundation of Harvard College, the ancient languages played a conspicuous part in the course

of instruction, as had been the case in the English colleges preceding it. The course of study at Harvard College as early as 1642 was particularly noticeable for its fullness in Greek, Hebrew, Chaldee, and Syriac. As to the Latin, that was the main requirement for admission. The rule was: "When the Schollar is able to understand Tully (Cicero), or such like Classicall Latine Author Extempore, and make and speake true Latine in verse and prose, *suo ut aiunt Marte*, and decline perfectly the paradigm's of nounes and verbes in the Greek tongue: Let him then and not before be capable of admission into Colledge." After such a preparation in Latin, previous to the college course, it was considered that no regular instruction in Latin was needed, but its *use* was required throughout the college curriculum.*

GROWTH OF THE AMERICAN COLLEGE.

From this beginning of college work in America great progress has been made; many colleges have been established, some of them endowed with large funds; the course of study has from time to time been raised and expanded, until to-day the work of the American college,—both in the older and the newer states,—is exerting an immense influence in promoting the welfare of the country and elevating the character of the people. If it be true that the progress of society in America during the last 250 years has been greater than in any other country in any equal period of the world's history, it is more than probable that this progress has been quite as much due to the American college as to any other source.

The problem therefore, of what a college curriculum should be, assumes fresh interest and is invested with great importance from the conspicuous part that the college is playing in the development of American society.

OBJECT OF THE COLLEGE.

At the outset then, it should be observed that during this whole period of the development of American colleges, as well as during the four centuries preceding this period in the English colleges, we find, well defined and continuous throughout, one grand purpose underlying all college work, and that is, development of mental power or the growth of the intellect. By a critical examination of this history it is clearly manifest that the principal object of college work is the increase of mental power, the growth of the man, the development of the higher faculties of his

*Indeed, it appears from a careful study of the early curriculum at Harvard that there were constant translations from Greek and other tongues into Latin. The use of Latin was far more general and universal than at more modern periods.

nature, the elevation of the human being, the widening of the difference between man and the brute creation ; in a word, it is taking a young man and, by this course of culture, by the training of the powers, by the practice of thought, creating in him the power to do, the ability to bring to pass, so that the young man can say when a difficult task is presented to him, "I can do it."

This, it seems to me, is the primary object of the college. It is true that it is designed to give to the student valuable information, to increase his knowledge of things ; but that is not its essential design, that is secondary. The grand province of college work is the increase of power through the cultivation of the intellect.

PRINCIPLES UNDERLYING THE CURRICULUM.

If what has now been said is agreed to, there would seem to be but little difficulty in determining the principles upon which the curriculum of the college should be based. The course of study should, obviously, be such as will best conduce to bring about this result. While on the one hand information studies should have their proper place in the college curriculum, it is clearly evident that the principal studies should be disciplinary. The problem set before the college is this:—given, a number of youth, averaging about eighteen years of age who have already received the necessary secondary instruction, what studies, in what order, and in what proportion, will best serve to discipline the powers of the mind, to develop its faculties, to give to it power of thought, clearness of perception, accuracy of reasoning, confidence in itself, and an ability to adapt means to ends, so as in any given case to produce the required result. Looking at the problem in this light, I think that most of us will agree, both from what the past has done and from what we ourselves have observed in the youth of our own acquaintance, that whatever else should be included in this curriculum, or excluded from it, at least four lines of study are essential:—(1) the study of the ancient classical languages of Greece and Rome ; (2) the study of the Mathematics ; (3) the study of the more disciplinary Natural Sciences, for example, Physics and Chemistry ; and (4) the Metaphysics.

DISCIPLINARY VALUE OF THE ANCIENT LANGUAGES.

It is not my purpose, nor would it be appropriate here to discuss to any great extent the question of the absolute value of these ancient languages as disciplinary studies in comparison with what may be done by scientific studies or the modern languages. I believe, however, that it is true that no other line of study has ever yet been found to take the place of these languages. The philosophical structure of the Greek, the virile strength

of the Latin, the accuracy of thought as expressed by these tongues, the concentration of mind necessary to their acquisition, the persistency of purpose, the continuity of effort, the weighing and balancing the shades of thought as expressed by different words, the knowledge derived from this study concerning the habits and customs of those ancient peoples, their laws, their religion, their philosophy; the cultivation of the memory, the imagination, and the faculty of accurate reasoning, of nice discrimination; and the constant exercise of these powers;—these and other considerations have, from age to age, proved that this study has exerted a wonderful influence in training and disciplining the faculties of the mind. It may, possibly, be, that in the future other studies will accomplish the same results, but our experience thus far makes it clear that no other studies have yet produced the same clearness, keenness, accuracy, thoroughness of mind, which have been acquired by this study. This being the case, very strong reasons ought to be given for discarding the study of the languages and literatures of the Romans and the Greeks, or either of them, and the burden of proof would clearly fall upon the innovators; at any rate, it would seem quite plain that the degree of “*Artium Magister*” should retain its ancient significance. For centuries this degree has indicated a liberally educated man and that liberal education has in all cases included a good working knowledge of these languages and their literatures.

I am not saying that the American college ought not to give another degree for another course of study, but I insist that the first and second degrees in the liberal “*Arts*” should continue to signify what has been their meaning for hundreds of years. The degree of *A. B.* has come to be of the nature of a Trade Mark, and it would be well if our patent laws could protect this Trade Mark, so that no institution in America could confer it upon one who was innocent of “*A little Latin and less Greek.*” From what has been said, it by no means follows that every college should insist upon a uniform curriculum for all of its students. In this age, characterized by such a diversity of trades and professions, it does not seem to me necessary that all students should pass through the same curriculum. In former times it was quite generally supposed that a young man who had taken the college course of study must choose one of the three learned professions,—Law, Medicine, or Divinity; but in these later days it is by no means assumed when one enters college, that he is destined to be either a lawyer, doctor, or minister. On the other hand it is quite as necessary now, for him to be college bred, if he intends to be a leader of men, in mercantile, manufacturing, agricultural, mechanical, or political life.

THE COLLEGE SHOULD EDUCATE LEADERS IN BUSINESS LIFE.

This is an age of great fluctuations in business, and it is often necessary

for a man to re-adjust his methods, or to change absolutely from one line of business to another. For this purpose he must be intelligent, he must have his powers of mind well in hand ; his judgment must be such that he will make no serious mistakes in turning from a painter to invent the telegraph, as Professor Morse did, or from the law to invent the cotton gin, and subsequently to the manufacture of fire arms, as Whitney did. If he is at the head of a large machine shop, he must be ready to-day to take a contract for making fifty thousand sewing-machines, and six months hence, another, to turn out with rapidity, a hundred thousand rifles, and then to construct without delay twenty thousand type-writers ; now, to make a trial machine for sticking needles into papers, and again to build a model for a newly-invented locomotive or a patent type-setter.

THREE COURSES OF STUDY PROPOSED.

It is unquestionably true that the colleges of America ought to educate a larger proportion of the people than formerly, and this training as it stands between the secondary education on the one hand and the university or professional school on the other, must necessarily be broader and more varied than was formerly needful. It would be therefore legitimate to have several distinct courses of study in the college. The literary and classical course should lead to the degree of Bachelor of Arts ; the scientific course in which one or both of the ancient languages might be displaced by fuller courses of scientific study, would properly lead to the degree of Bachelor of Science ; and an intermediate course, which, while retaining the Latin and omitting the Greek, should give larger scope to Philosophy, or Science, or the Mathematics, or the Modern Languages, might confer the degree of Bachelor of Philosophy. Most persons will probably at once admit that great advantages would result from this division into different courses. Especially is it apparent that, while the full curriculum of Latin and Greek is retained for those who desire to obtain the classical education, a broader basis of scientific study is allowed for those whose subsequent pursuits demand for them a wider investigation of the laws, principles, and facts of scientific inquiry.

Let one point especially, be observed—The disciples of science should not object to the marking of these two courses by their proper names and their appropriate degrees. If there is any advantage in a fuller scientific course which shall cut off a portion of the classical study, that advantage should be shown by the degree of B. S. rather than B. A. On the other hand, if this distinction of degrees is made, no one would suppose that a "Bachelor of Arts" could be destitute of the knowledge and discipline which come from the study of these ancient languages.

In all cases, however, each of these degrees should be preceded by a full curriculum of an equal four years course of study. In quantity and time, these courses should be as nearly equal as possible.

This plan would furnish three well marked courses of study, and these lines would be found, possibly, amply sufficient for all purposes, provided a judicious course of electives should be introduced; and this suggests, what seems to have proved within a few years, a very troublesome question.

THE QUESTION OF ELECTIVES.

That there should be electives in college, few persons have any doubt; on the other hand it is believed that most thoughtful educators will agree that many college students are totally unable to select the best lines of study for themselves, and, hence, that this selection should not be too generally placed in their hands.

THE PROPER PLACE OF THE COLLEGE IN OUR SYSTEM.

Let us now consider the proper place of the American college in our system of education. There are those who believe that the college should entirely drop out of our system, that there is no legitimate place for it, that the true course of education demands that our youth should pass directly from the secondary schools to the university. They would place Freshman and Sophomore studies in the secondary schools and the last two years of the college work in the universities. This would be to adopt something like the German system of Gymnasias and Universities. I cannot believe, however, that the intelligent people of America will allow our grand system of American colleges, which have been planted and liberally endowed in all the States of this Union, which have done such a noble work in the generations past, and which to-day are doing more for the development of our country than ever before, to be blotted out of existence for no good reason, but merely to satisfy the whims of a certain set of theoretical iconoclasts.

Another theory seems to have sprung up of late, by which it would appear that the work of the colleges should be considered synonymous with that of the universities; that the under-graduates, ranging from sixteen to twenty years of age, should be treated as full-grown men, thoroughly trained, with mature judgment, and capable of a wise choice of special or professional studies. But this would be to lower materially the whole scale of our educational work, by an amount equal to from two to four years of study, which would be utterly and entirely contrary to the spirit of this age, and the plain wants of our American society. Such theories will scarcely stand the test of continued trial.

In the order of nature, parents have the care and control of their children, and teachers and college professors ought not to be quite so ignorant of what is best for a boy as the boy himself usually is.

It is therefore obvious that the studies of the Freshman and Sophomore classes in our American colleges should be quite rigidly confined to the prescribed curriculum in each of the three principal courses of study heretofore indicated. When, however, the student has reached the average age of twenty years, and has faithfully pursued the college course for two years, he may wisely be permitted to exercise some choice of his studies during the latter half of his college work.

I have been gratified to find upon examination, that several of the leading colleges are now carrying out the principles just enunciated. Within a few years there has been a large increase in elective studies in many colleges, and most of them have limited these electives to the junior and senior years. In a few institutions, however, a broader range of electives has prevailed, and the oldest college in America has recently received wide notoriety for its championship of the principle of elective studies throughout the college course and even in the secondary schools preceding this course.

ELECTIVES AT HARVARD.

In the last annual report of the Dean of Harvard College, the following are given as prescribed studies necessary to be taken by all the students :

For the Freshman class, (1) English, (2) German or French, (3) Chemistry, (4) Physics. For the Sophomore class, (1) Rhetoric, (2) Themes. For the Junior class, (1) Themes, (2) Forensics. For the Senior class, Forensics.

The list of elective studies occupies more than 19 pages of the report. If I have read correctly, there are 185 electives ; these electives are classified in 13 groups, the number of studies in the different groups varying from two to twenty-one. It should be borne in mind, however, that no student has the opportunity to take any of these 185 courses of study which he may choose ; he is permitted to take only one study from any one group, since all the studies of a group are set down for a particular hour of the day. Of course this plan materially restricts the range of electives open to any one student.

THE GROUP SYSTEM AT JOHNS HOPKINS.

At Johns Hopkins University a carefully elaborated and thoroughly classified group system is adopted in the collegiate course. By this plan there are seven groups of studies, as follows :—

(1) The Classical group, corresponding closely with what has been hitherto known in this country as the usual college course ;

(2) The Mathematical-Physical, which meets the wants of those who are expecting to enter upon the modern vocations in which rigid mathematical discipline is indispensable ;

(3) The Chemical-Biological, or the Preliminary Medical, chiefly intended for those who expect at a later day to pursue the study of medicine.

(4) The Physical-Chemical, leading to scientific pursuits which are neither chiefly mathematical nor chiefly biological ;

(5) The Latin-Mathematical, which affords a good fundamental training, without prolonged attention to the study of Greek ;

(6) The Historical-Political, which furnishes a basis for the subsequent study of law ;

(7) The Modern Language group, in which French, German, English, and, in exceptional cases, other modern languages, take the place of Latin and Greek in the traditional classical course.

The studies which are found in all these courses are, Logic, Ethics, and Psychology ; Physical Geography and History ; English, French, and German ; a laboratory course for at least one year ; and also Physical Culture, Vocal Culture, and Drawing.

Pres. Gilman, in speaking of these groups, says :—" I do not consider these designations as felicitous,—but they are convenient. Personally I prefer the phrases which were employed here a few years ago, when the groups were thus announced, for example,—

"(1) For one who wishes a good Classical training ; marked proficiency in Greek and Latin ; in addition, Modern Languages, Philosophy, and one scientific subject.

"(2) For one who looks towards a course in Medicine ; marked proficiency in Biology and either Chemistry or Physics ; in addition, either Chemistry or Physics, Modern Languages, and Philosophy.

"(3) For one who prefers Mathematical studies, with reference to Engineering, Astronomy, Teaching, etc. ; marked proficiency in Mathematics and Physics ; in addition, Modern Languages, Philosophy, and Chemistry.

"(4) For one who wishes an education in Scientific studies, not having chosen his specialty ; marked proficiency in Mathematics, and in either Chemistry, Physics, or Biology ; in addition, any of the remaining subjects.

"(5) For one who expects to pursue a course in Theology ; marked proficiency in Greek and Hebrew ; in addition, Philosophy and two scientific subjects.

"(6) For one who proposes to study Law ; the same as No. 1 above, with the substitutions of Philosophy and History for Greek, and two scientific subjects (instead of one).

"(7) For one who wishes a Literary Training not rigidly Classical ; marked proficiency in Modern Languages and Philosophy ; in addition, Latin and any other two subjects."

It will be observed that this group system has direct reference to the subsequent course to be pursued by the student. Much may be said commendatory of this plan, and it suggests to us the necessity of a *definite purpose behind the choice of electives in all cases.*

Hence it would seem to be very clear that there should be the most careful consideration of these studies as to their nature, advantages, and effects, particularly in relation to the habits of mind, mental characteristics and proposed profession,—if already determined upon,—of the student. Wherever practicable, all these points should be canvassed by the professor, the parent, and the student together, since the object of the election of special studies over others, is on account of the greater adaptation of the studies chosen, for that particular student. Let it, however, not be forgotten that the grand object of college training, as heretofore stated, is discipline, rather than information.

COLLEGES NORTH AND COLLEGES SOUTH.

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In the absence of the speaker appointed to discuss "Colleges South *versus* Colleges North," I have been requested to take the place assigned him on the programme for to-day. Having consented on so short notice to discuss a topic of so great importance, I may frankly state that this paper must follow mainly a line of previous investigation. In order to relieve the question of the antagonism implied as existing between colleges North and South, I prefer to write it, Colleges North *and* Colleges South. In this form the subject calls for a simple comparison in a spirit friendly to the colleges in the North, as well as to those in the South.

Before making the comparison of colleges North and South, it may be well to examine the statistics with reference to higher institutions in the United States.

The Commissioner of Education reports, for 1883-84, 370 universities and colleges, not counting those having only preparatory students. There are at least 30 agricultural and mechanical colleges, not included in the 370. For the "superior instruction of women" the report tabulates 236 additional institutions. In addition to all these, there are 255 normal colleges and schools, 221 commercial and business colleges, and several hundred institutions for professional study.

Referring to the 370 universities and colleges, the Commissioner says: "One hundred and twenty-three of the institutions in the table are designated as universities. A few of these have a full university organization and large resources; others are limited at present to one or more departments; . . . in others, the name cannot be regarded as expressing either present scope or future possibilities, and its use is to be regretted." Germany, with 45,000,000 people, has 21 universities; our country, with a little more than 50,000,000, has 123! Germany has *real* universities; America has many that are universities *only in name*.

The number of universities in the whole number of institutions (of the 370) credited to each of a half dozen states is as follows:—In Ohio, the universities are 12 out of 33; in Illinois, 8 of 29; in New York, 9 of 29; in Pennsylvania, 5 of 26; in Tennessee, 9 of 20; and in Texas, 6 of 11. That is, these six states have 49 universities in a total of 148 institutions.

Six states with more than double the *number* of universities in the German Empire!

But there is still more to be said about this predilection of Americans for high-sounding titles. In the list of 1,588 "institutions for secondary instruction", there are 7 with the pretentious title of "university", and 127 with the ambitious name of "college"! And still further, in the list of 169 preparatory schools are 3 "universities" *in name* and 9 "colleges" *so-called!*

By examining somewhat into the resources and work of the 370 institutions, we may get an idea of the average American college. Ten of these institutions had, in 1884, a combined income of \$1,922,504; an average of \$192,250. Of the 370 institutions, 75 did not report income; the remaining 295 had an aggregate income of \$5,908,459; an average of \$20,000. Omitting the 10 wealthiest also, 285 had \$3,985,955; average, nearly \$14,000. There are 88 institutions that report under \$5,000 income each, the average being only \$2,556. It is more than probable that many very weak colleges are embraced in the 75 that do not report income.

In 1884, the 370 institutions had an aggregate enrollment of 65,522 students; of these, 32,767 were in college studies. Of the whole number of students, the average to each college was 177; of the college students, the average was nearly 89. College students are not reported separately by 35 institutions. Of the remainder, 2 report more than 600 college students each; 2 from 500 to 600; 4 from 400 to 500; 7 from 300 to 400; 19 from 200 to 300; 75 from 100 to 200; and 226 under 100. Of these 226 colleges, 49 report under 25 college students, the average being a little more than 14 to each. We take it for granted that some of these weak colleges are supported mainly (if they may be said to be supported at all) by the tuition-fees of preparatory students.

After making these averages, we are prepared to appreciate the following remarks of the Commissioner of Education:—"Undoubtedly we have too many feeble colleges; too many that, judged by their work, are not above the grade of preparatory schools and not well furnished for even that position. The number of these weaklings does not, however, appear to be on the increase; there is reason to hope that we have passed the period of pretension, and that colleges which are only such in name will gradually abandon their false position, and that those that remain will become better and better prepared for their duties." Commissioner Eaton says further: "Of the 55 colleges tabulated in 1875 and not in 1884, a number have given up the endeavor to maintain the college standard, but are doing excellent work as preparatory schools; . . . others have modified their original purpose and courses of study; . . . about a third have suspended; others, from which no recent reports have been received, are known to be struggling against adverse circumstances." On the other

hand, it is stated that a good many colleges not reported in 1875 have become "strong and useful," and are included in the list of 370 for 1884.

The West and the South have been most seriously affected by the mania for multiplying colleges (using the term here and elsewhere to include universities). We might draw some practical illustrations of this folly from the West; but it will be more to our purpose to compare the New England, the Middle, and the Southern States as regards the number, strength, rank, and work of their colleges.

I.—ENDOWMENTS AND EQUIPMENTS.

Before we can fully understand the difference between colleges North and South, and fully appreciate the difficulties to be overcome in the South, we must look into the question of the pecuniary ability of the two sections to support and endow educational institutions. As the colored people, who constitute so large a proportion of the population of the Southern States, own so little property comparatively, a *per capita* estimate based on the entire population of the sections would not fairly represent the ability of the white people of the South to support colleges. In making the comparison, therefore, we shall assume that all the property, North and South, belongs to the white people, and when we come to give the number of colleges, we shall not include those for colored people.* We take the figures from the census of 1880. If we had reliable statistics for this year, the showing would be more favorable to the South.

The six New England States have a white population of 3,968,789, and an assessed valuation of real and personal property of \$2,651,555,882.

The six Middle States (counting Maryland and the District of Columbia as two): white population, 11,267,914; assessed valuation, \$5,564,578,488.

The thirteen Southern States (Missouri not included): white population, 9,592,568; assessed valuation, \$2,370,923,269.

We have, then, for every white person in the New England States, \$668; in the Middle States, \$494; and in the Southern States, \$247. That is, the people of the New England States have more than two and a half times, and those of the Middle States exactly twice, the pecuniary ability of the Southern people to support and endow colleges.

The following additional comparisons may be of service in this connection:—

The State of New York (including the city) exceeds by \$281,017,737 the assessed valuation of the thirteen Southern States.

* A good many of the institutions for colored people are called universities. Some of these schools rank as respectable colleges, and all of them are doing a good and much needed work. They are omitted in this discussion for the reason assigned, and not for any lack of appreciation of their value and importance. It may be remarked here that the Hampton Institute in Virginia, the best and most useful school for colored people in the South, does not even claim to be a college.

Pennsylvania has an assessed valuation more than two-thirds that of the Southern States, and more than five times that of Virginia.

Massachusetts exceeds by \$365,900,582 the assessed valuation of Virginia, Kentucky, Georgia, and Texas. It has twenty-six times as much property to the square mile as Virginia.

Connecticut, less than one-eighth the area of Virginia, more than equals that state in wealth.

Rhode Island, one forty-seventh of Georgia, more than equals that state in wealth.

New York City nearly equals Virginia, Kentucky, Georgia, and Texas, the four wealthiest Southern States.

Boston nearly equals Virginia and Kentucky.

Philadelphia nearly equals Virginia and Georgia.

We next consider the number of colleges and the amount invested in property and endowment. In our summary, we include the agricultural and mechanical colleges and exclude those for women only, and also those for colored people. In the endowments, we include the capital represented by the annual state appropriations, reckoning interest at six per cent.

The New England States: Number of colleges, 19; value of college buildings, grounds, etc., \$9,647,500 *; endowments (productive funds), \$12,231,420; scholarship funds (income used to aid students), \$1,218,960; volumes in college libraries, 703,625.

The Middle States: Number of colleges, 70; buildings, etc., \$14,631,600; endowments, \$26,046,140; scholarship funds, \$508,000; volumes in libraries, 603,753.

The Southern States: Number of colleges, 97; buildings, etc., \$8,016,750; endowments, \$10,232,931; scholarship funds, \$59,800; volumes in libraries, 382,361.

The New England States, for the white population, have \$2.43 *per capita* invested in college property and \$3.08 *per capita* in college endowments; the Middle States have \$1.29 and \$2.31 respectively; and the Southern States have \$0.84 and \$1.07 respectively. Adding the *per capita* investments in property and endowment, we find the total to be, in the New England States, \$5.51; in the Middle States, \$3.60; and in the Southern States, \$1.91. Let us next ascertain the average financial strength and library advantages of the colleges in the three groups of States.

Average of the 19 colleges in the New England States: Buildings, etc., \$507,776; endowment, \$643,758; scholarships, \$64,050; volumes in libraries, 37,033.

Average of the 70 colleges in the Middle States: Buildings, etc., \$209,022; endowment, \$372,087; scholarships, \$7,257; volumes in libraries, 8,625.

* I failed in two efforts to get an estimate of the value of the grounds, buildings, etc., of Yale College. Such an estimate would probably exceed \$1,000,000; but I do not feel at liberty to include any guess of my own in making out the table.

Average of the 97 colleges in the Southern States: Buildings, etc., \$82,646; endowment, \$105,494; scholarships, \$618; volumes in libraries, 3,942. The free tuition feature of State Universities in the South, is equivalent to a large amount invested in scholarship funds.

After this comparison of the financial condition of colleges North and South, it may be well to inquire into the number of college students furnished by the different sections of our country.

According to Commissioner Eaton, the center of population in the United States in 1880, was at latitude $39^{\circ} 4' 8''$ N. and longitude $84^{\circ} 39' 40''$ W. from Greenwich; or, in other words, this center was a little to the west of Cincinnati. Supposing the country to be divided into four parts ranged around this center, the proportion of college students to inhabitants would be as follows: In the northeast section, 1 to every 1,346 inhabitants; in the northwest section, 1 to 1,417; in the southeast, 1 to 2,436; and in the southwest, 1 to 7,404. The northeast section includes the New England and the Middle States. West Virginia, Virginia, North Carolina, South Carolina, Georgia, and Florida make up the southeast section; the other Southern States are included in the southwest section. It is well to bear in mind that colored students are embraced in the 32,767 college students enrolled in the 370 colleges; that the colored people, though numerous, furnish only a small proportion of students in college studies; and that, if a comparison of the sections were made on the basis of the white population only, the result would be more favorable to the sections embracing the Southern States. But after making due allowances, the fact remains that the proportion of college students to the whole number of inhabitants is largest, as we should expect, in the wealthier sections. It would be easy to show that the income of the colleges in those sections is larger, not only by reason of the greater number of students, but also because the tuition-fee is usually higher in the wealthier sections of the country. As compared with the New England and the Middle States, the Southern States are thus seen to be placed at a double disadvantage in the matter of supporting colleges by the income derived from students.

With fewer college students and less wealth in proportion to population, it follows that the Southern people should not undertake to support more colleges in proportion to population than are maintained at the North. The only ground upon which this proposition may be questioned is that of the larger area of the South; and hence we present next the proportion of colleges to area and white population, and also the white population to a square mile.

The New England States (area, 66,465 square miles) have one college to every 3,498 square miles, and to every 208,884 inhabitants; population to a square mile, 60.

The Middle States (area, 116,530 square miles) have one college to every 1,665 square miles, and to every 160,970 inhabitants; population to a square mile, 97.

The Southern States (area, 818,065 square miles) have one college to every 8,434 square miles, and to every 98,892 inhabitants; population to a square mile, 12.

The facilities for travelling have now become so good and so common throughout the South, that so large a proportion of colleges to inhabitants cannot be fully justified on the ground of large area. If so large a number of colleges could be well endowed and then supplied with students in considerable numbers, there would be less reason for objecting to the number. In our calculations we have included those institutions classed by Commissioner Eaton as universities and colleges, and also the agricultural colleges, thus making in all 97. That there is a tendency at the South, as at the West, to multiply universities and colleges is evident from the fact that in the lists of secondary and preparatory schools, there are credited to the Southern States 4 "universities" and 58 "colleges" (not counting a great many for women only and a few for colored people). In the list of 370 universities and colleges, Tennessee is credited with 20; but among secondary and preparatory schools in that State are 17 "colleges," and besides all these there are 21 "institutions for the superior instruction of women," making a total of 58 (not including those for colored people). In like manner we find that Kentucky has a total of 50 colleges.

If we were to make comparisons of the colleges for women in the three groups of states, we should find the same tendency to multiply the number of weak institutions in the South. It will be sufficient simply to say that of the 236 "institutions for the superior instruction of women" in the United States in 1884, only 19 are credited to New England and only 39 to the Middle States, while the Southern States have 121, or more than half of the whole number! Of the 844 degrees conferred in that year by these institutions, 582 were conferred by schools in the South,—Tennessee being far ahead with 135 degrees given in one year!

It is not surprising that this state of things should furnish a topic of ridicule to the press and of just condemnation to thoughtful educators throughout our country. Professor Charles Forster Smith—a native of South Carolina, a graduate of Wofford College in that State, a professor for some time in Williams College, and also in his *alma mater*, and since that for some years a professor in Vanderbilt University—has written two able and suggestive articles for *The Atlantic Monthly* on "Southern Schools and Colleges." (October, 1884, and December, 1885.) As Professor Smith brings to the discussion of this subject accurate knowledge, wide observation, and personal experience, it may be well to present a few extracts from his articles:

"The greatest evil in Southern education, it seems to me, is the fact that we have so many colleges and universities. . . . Any one who will study the question carefully will be very likely to come to the conclusion that in the United States, culture is generally in the inverse ratio to the *number* of colleges. Where you find the largest number of colleges, you will be apt to find the fewest fitting schools and the lowest state of what we call the higher education. In fact, great density of ignorance round about is necessary to the welfare of a certain kind of college. . . . Within two years I have noted eight colleges, or universities in prospect, founded or revived in the South alone. . . . A defunct college in Texas is, I am informed, to be brought to life on \$10,000, and hardly is the ink dry that records that fact, before I read of another college in that State worth \$10,400. (From which it must be inferred, perhaps, that a dollar will still go as far in a Texas college as a dollar in Washington's time). . . .

"A few years ago, in a certain backwoods section, there were in the same class in a large country school, two boys; one, the son of the principal; the other, a man whom I afterwards knew at Harvard, and from whom I had the story. The principal determined, as he had more than one hundred pupils, to charter his school as a college. He did so, and in due time his son was made professor. The other boy went to Illinois, studied a while in a *university* there, and then went to Phillips Exeter Academy to get ready for Harvard. When I knew him he was in the Senior class at Harvard; his former classmate had been for some time a professor in the new college. About that time a flaming puff in a local newspaper challenged the United States, England, or Germany to show a more learned faculty or better advantages than this college offered. I find its whole property reported in 1880 at \$4,000. . . . The president of a university in Texas told me that he would have preferred to call his institution a college, but that there the name of college was so common and in such ill repute, that the character of the institution would have been totally misunderstood. This agrees pretty well with a certain Texas girl's idea of a college. A modest graduate of a Georgia college, whom she persisted in calling 'professor' and his school 'the college,' begged her not to put him to the blush. 'Well,' said she, 'it was a college before it burned down, for it was *three stories high*.' And this is about on a par with the report from a certain Western State, where, it is said, they have three universities and the *logs cut* for the fourth."

And this serves to remind me that about eight years ago two graduates of a "university" in the far Southwest were admitted into the Junior class at Roanoke College, where they received their diplomas after two years' study.

The source of support of our colleges, North and South, deserves more particular notice before we pass to the next division of our subject.

In the North that great fundamental idea of the fathers of the Constitution — of Washington, Jefferson, and Madison, as well as of their Northern colleagues — that a republican government can rest safely only on the intelligence and virtue of the people, took practical shape in the establishment of a system of public free schools, supported by taxation. Higher education, though aided at times by various States, was never so controlled, until the establishment of agricultural colleges by national aid, as to make any single college or university in the New England or Middle States a "State School" in the present accepted meaning of that term. The University of Vermont at Burlington, the College of New Jersey at Princeton, and the University of Pennsylvania in Philadelphia, although bearing the names of states, are nevertheless governed by close corporations, or boards of trustees, wholly independent of state legislatures. Even Cornell University — incorporated in 1865 — which owes its foundation to the land-scrip appropriated by Congress and to the generosity of Ezra Cornell, is governed by twenty-three trustees, of whom only four must be connected with the state government. The people of the Northern States, then, have acted upon the idea that the State should provide free elementary education so as to fit all, and especially the poor, for the duties of citizenship; and that the maintenance of higher education should be left to the benefactions of the friends of liberal culture and religion.

Whatever may have been the views of the leaders of public opinion in the South before the civil war, the practical outcome of the Southern idea was just the opposite of that at the North. At the South, almost no provision was made for the masses who could not otherwise obtain even an elementary education; while nearly every Southern State established a university, which in most cases could be attended only by those who had sufficient means to avail themselves of advantages already provided elsewhere. At the North, the system itself seemed to embody the idea that education was regarded as a necessity and a blessing to all; at the South, that it was a blessing and a necessity only to the few who were to be the social and political leaders of the people.

Since the war, the public school system has been introduced into every Southern State, so that now, when less able than before, these states are undertaking to provide for both the lower and the higher education of the people. Every Southern State maintains at least one university or college; some states have two; and others, three institutions. Virginia and South Carolina also maintain each a State Military School by legislative appropriations, though upon what grounds of public policy or public need this special training is justified, it would be difficult to

determine. The Southern States, then, are attempting to do more than is done by the New England or the Middle States.

If it is right for the state to maintain free universities, as well as free schools, then it follows that the free schools ought to prepare students for the universities. Granting the premises, no one can resist the conclusion. There is far more reason why the states should provide high schools than that they should maintain universities, since a great many more children would be educated in the former than in the latter. The high schools would meet the wants of nearly all classes; the universities, even with free tuition, do not meet the wants of those who are not able to bear the expenses necessary to bring the free tuition within their reach. At the North the public high schools are so organized as to fit students for the Freshman class in colleges; at the Northwest, the courses in these schools are arranged to lead up to the state universities. The tendency at the South is already strongly in the direction of a complete system; and in the coming expansion of the free school curriculum, the adjustment of studies will probably be made with reference to the state institutions, and without regard to the claims of the other colleges.

There is a diversity of sentiment in regard to the support of universities and colleges by the state. In an address at Monteagle, Tennessee, in 1884, Dr. Atticus G. Haygood, of Georgia, presented the following arguments against such support:

"The arguments that sustain the principle of elementary education at public expense do not apply to the luxuries of education. The support of colleges and universities by taxation is foreign to the principles which underlie the common school system. College education at public expense is un-American; it is at home in monarchical countries; it does not belong to us. Higher education is not a legitimate function of government. College training is not necessary to qualify the people to be good citizens; the arguments that demand the public school for the elementary education of the whole people, forbid the education of a few in college or university at public expense. . . . In any country the constituency of the college is a very small one when compared with the masses of the people. I have in mind a state college that registered last year 204 students in a state whose population is well on to two millions. Yet the whole people — rich and poor, white and black — were taxed to give free college education to these two hundred and four youths — most of them the sons of rich or well-to-do people.

"Tuition is the least part of the expense of college education; it would be more righteous to tax the people to pay for the board and clothing of these students, for then the poor as well as the rich would have a chance at the benefits of college or university education provided for by the taxation of the whole people.

"Higher education there must be, else there will presently be an end of all efficient elementary education; if it could not be provided except through colleges and universities supported by the state, then the argument for taxing everybody to give free tuition to the children of a few comfortable citizens would be stronger. But higher education does not depend upon State colleges and universities.

"What are the facts in the case? First, the colleges and universities that are not in any way related to the state, educate vastly more students than the state institutions educate. To say the least, they do as good work as the state schools do. The facts require a stronger statement: with only two or three exceptions in the United States, the state colleges do not rank with institutions not connected with the state. To mention only three of the older and one of the new — where many might be mentioned — how many state institutions rank with Yale, or Princeton, or Harvard, or Johns Hopkins, either as to the number of students or the quality of the work?"

And it may be added that a higher degree of confidence is felt by the public in the continued good management of Harvard, Yale, Princeton, and Johns Hopkins by their board of trustees, than would be felt if these institutions were placed under the control of the political parties in power in the states in which these universities are situated.

One of the main arguments adduced in favor of supporting universities at state expense is, that only in this way will the material resources of any institution be sufficient to maintain a high standard of scholarship. Although the force of this argument was far greater fifty years ago than it is at present, it is readily conceded that the state universities, especially that of Virginia, have exerted a powerful influence in raising the standard of education at the South. They have also been able, through legislative appropriations, to erect better buildings and provide better equipments and facilities of all kinds than the majority of other colleges in the same section. A comparison of Southern institutions shows that of the aggregate amount of property (grounds, buildings, etc.), held by the 97 colleges, \$8,016,750, the State schools had (in 1883-84), \$3,951,249, and the other colleges \$4,065,501. Of the aggregate endowments, \$10,232,931, the state institutions had \$6,782,556 (of this amount, \$3,817,000 was represented by annual appropriations, reckoning interest at six per cent.), and the other colleges \$3,450,374. The average of the state institutions was, in buildings, etc., \$179,654, and in endowments, \$308,300; of the other colleges, in buildings, etc., \$54,200, and in endowments, \$46,000. The difference in these sums means a great deal to those who appreciate the importance of endowments in sustaining colleges.

Besides the state universities, three others in the South have consider-

able endowments — Washington and Lee, Vanderbilt, and the new Tulane University of Louisiana. Although a good many of the colleges have respectable sums invested as endowment, there are few, if any, that do not feel the urgent need of additional income to meet increasing demands for better instruction and improved facilities. In building up Southern colleges, much good work has been done by able and faithful men who willingly sacrificed personal comfort and preferment in their devotion to the cause of Christian education. This feature of the work deserves a bright chapter in the history — yet to be written — of education in the South.

To the credit of the Southern people, it should be said that they show more willingness to contribute to educational objects in recent years than they did in the days of their abundance before the war. The colleges, too, catching the spirit of general improvement — especially in educational work — have in many cases made successful efforts to raise money for endowment. The almost general conviction that liberal endowments are necessary and the increasing evidence of willingness to contribute to such endowments, are hopeful signs of continued improvement in Southern colleges.

II. THE STANDARD OF SCHOLARSHIP.

The standard of scholarship in colleges is largely determined by the requirements for admission to the Freshman class, and these in turn are in a measure determined by the number and character of fitting schools. Admission requirements are higher and more nearly uniform in the New England and the Middle States than at the South or at the West. Of the 169 "preparatory schools" tabulated in 1883-84, Commissioner Eaton says, "128, or a little more than three-fourths, are in the New England and the Middle Atlantic States. These include 75 per cent. of all the scholars in this class of schools; 82 per cent. of the property valuation; 93 per cent. of the income from productive funds; and 79 per cent. of the tuition-fees." Of this class of schools very few exist in the West, because the State system of education begins with the common schools and leads through the high schools up to the university. Professor Payne of the University of Michigan, stated at the Saratoga meeting of this Association last year, that not a single academy of the New England type exists in Michigan, that these have been absorbed by the high schools, and that the denominational colleges find it necessary to maintain preparatory departments to fit pupils for the Freshman class.

In our country at large, we cannot be said to have a system of higher education, but only to be approaching one. The nearest approach yet attained in any part of the Union is in the New England States; next to

that, in the Middle States; in the Southern States, the best educational results have been reached in Virginia. In New England, to each class of institutions is assigned a particular sphere of work. Among the 19 colleges, only two reported preparatory students in 1884, and these two were Catholic institutions. The specific work of 59 preparatory schools is to fit boys for the Freshman class. But there are many other schools in New England that prepare boys for college. Massachusetts alone has 228 public high schools of this class. From President Eliot's last report, recently issued, I notice that 28 per cent. of the 264 students in the present Freshman class at Harvard were fitted for college by public schools. That Massachusetts employs competent teachers in these schools may be inferred from the salaries paid, high school teachers receiving from \$1,000 to \$3,700 a year, and the average wages of male teachers being \$120 a month. With such a force of workers to prepare boys for college, it is easy to understand how the New England colleges maintain their high standard for admission to the Freshman class.

The following summary presents the number and financial condition of preparatory schools, North and South:

The New England States: Number of preparatory schools, 59; value of buildings, grounds, etc., \$2,811,398; endowments, \$1,580,400; volumes in libraries, 63,025.

The Middle States: Number of preparatory schools, 59; buildings, etc., \$3,210,682; endowments, \$616,000; volumes in libraries, 39,857.

The Southern States: Number of preparatory schools, 13*; buildings, etc., \$150,500; endowments, \$50,000; volumes in libraries, 10,200.

In New England the best academies, notwithstanding their able faculties, large endowments, and ample equipments, do not undertake to prepare their students for a higher class than the Freshman. And public sentiment holds these schools to their proper work. For 70 colleges, it is to be noted, that the Middle States have only 59 preparatory schools, and for 87 colleges the Southern States only 13.

It will be in place here to speak of a difference in college organization, North and South, which will in part account for the small number of preparatory schools credited to the Southern States.

In founding the University of Virginia, Thomas Jefferson aimed to establish in this country a university on the German plan, though without a theological faculty. It was to be the capstone of the educational system of the state, the lower schools leading up to it and the colleges sending their graduates to this university for advanced work or professional

* Many seminaries, institutes, academies, and high schools in the South, not being strictly preparatory to colleges, are classed by Commissioner Eaton as "institutions for secondary instruction." This remark applies, also, to many schools at the West, and to a smaller number at the North.

study. The "academic" (or collegiate) studies, instead of being distributed among four classes, are divided into "schools" which are in turn subdivided, some into two classes — Junior and Senior — and others into three—Junior, Intermediate, and Senior. The instruction is given mainly by lectures. The student elects his "schools," and is admitted almost without examination, except in the case of "academic" students from Virginia. While it is easy to enter the classes of the University it is a difficult task to take degrees, the high standard for graduation being strictly enforced. In this particular it is generally admitted that the University of Virginia is not surpassed by any other institutions in this country, except the United States Military and Naval Academies. While giving due credit to the University for its high requirements for degrees, it should be remarked that if even moderate strictness were observed in admitting students to the classes, the proportion of those failing to pass the examinations would be greatly reduced.

University methods can be applied successfully only with students already fairly well trained and disciplined. The school-and-lecture system is not adapted to the instruction of men and boys who have had only elementary training. And yet the example set by the University of Virginia has been followed in the organization of most of the state universities, as well as of many of the colleges in the South. In Virginia, besides the State University, Washington and Lee University, and Richmond and Randolph-Macon, colleges are organized on the school-plan. Some of the former champions of this plan now pronounce it a failure, especially in colleges. Professor Edward S. Joynes, of the South Carolina College, goes so far as to call it "a failure all round"; and President William Preston Johnston, of Tulane University, says, "While I approve of the 'elective system' for *real* universities, I regard its application to colleges and schools as a misfortune." The reaction is so strong that a number of institutions are returning to the regular college organization. And this is one of the "signs of the times," indicating that the educational sentiment of the South is becoming more and more favorable to a better system of education.

The courses in fitting schools are determined by the organization, as well as by the requirements, of higher institutions. In New England, where the colleges have a prescribed curriculum and generally uniform requirements for admission, the preparatory schools arrange their courses to lead up to the Freshman class. In the South, where the school-system exists in many universities and colleges, the academies and high schools, as we should expect, generally have elective or irregular courses, so that very few of these schools prepare boys regularly for the Freshman class in college. And again, the standard for admission to college is so variable that an academy with a prescribed course of study can not in the same

classes prepare boys for a dozen colleges at the South as may readily be done at the North.

The same excellent authority already quoted from *The Atlantic Monthly* says: "Such heterogeneous elements as the school-system brings together, in our practical application of it, prevent anything like thorough drill or systematic, progressive work in the classroom. It is my experience, and I think it is general, that in most classes will be found men differing in training all the way from one to four years. How much this adds to the labor of teaching may be easily imagined. I reckon honestly, from actual trial in New England and Southern colleges, that the teacher must expend at least twice as much vital energy on our mixed lower classes, as on the better arranged classes there." If a professor in Vanderbilt University has that experience, what must be the condition of classification and instruction in some of our so-called universities and colleges!

The irregularities referred to suggest a partial explanation of the fact that the Commissioner of Education in 1884, placed only thirteen institutions at the South in the list of "preparatory schools." It must be said here that there are some excellent university high schools, and a large number of "institutions for secondary instruction"; among the latter, however, a good many chartered schools that begin their pupils at A B C and "finish" them with A.B., or some other of a half dozen degrees.

It appears, then, that there are institutions organized on the university plan, and yet doing work that legitimately belongs to colleges and even preparatory schools. The colleges organized on the school-system compete, on the one hand, with the universities, and, on the other, with the preparatory schools. And again, our regular colleges compete with the universities and "school"-colleges, and many of them, by means of preparatory departments, compete also with the academies and high schools. The preparatory schools, in turn, defend themselves by undertaking to do college and university work, sending their students to colleges to enter, with inferior preparation, the Sophomore and Junior classes, and to the university to enter advanced classes, or, in some cases, after completing in a high school, the entire course prescribed in a department of the university. In the midst of this competition between the higher and the lower institutions and this underlapping and overlapping of courses of study, is it any wonder that in the South many persons have a confused idea of what a university ought to be, what the sphere of the college is, and what a fitting school should undertake to do?

Competition is said to be the life of trade; and fair competition tends to infuse life also into educational work and to raise the standard of scholarship. But that educational competition which is wholesome, is of university with university, college with college, and fitting-school with fitting-school.

It is quite another thing when institutions of different grades compete with each other for students in order that faculties may have a bare living from tuition-fees. The result of that sort of competition is to make the requirements for admission to the weaker institutions an indefinite something not meant to exclude anybody, and the standard for graduation a sort of jumping-stick that may be lowered enough for the weakest to have an easy walk-over. Even the state institutions enter to some extent into the competition for students because they need the influence of numbers when applications are made for legislative appropriations. And thus the cause of higher education is often wounded in the house of its friends and oftener depreciated in the eyes of the public. But what is a college or university to do that has little or no endowment, receives no aid from the state, and yet has a faculty to support and current expenses to meet? And this, too, when parents and sons both wish the greatest speed made in going through the curriculum? Boys hurry, half-prepared, from the academy to the college, and then, if permitted, hurry over the course to take a diploma, having but little appreciation of thorough scholarship and less of true culture. In the South, too, where a large majority of the students are poor, the want of means frequently intensifies the desire to complete the college course in a period insufficient for thorough work. The selection of a college is in too many cases made to turn upon the single item of expense, or upon the shortness of the time required to obtain the coveted diploma. Our young men catch the spirit of this age in which we all try to live too fast. Among the Spartans boys were boys until they attained the age of eighteen, and then youths until they were thirty; but in our progressive day, boyhood often ends where it should begin, and youth, immortalized in song and story as the joyous springtime of existence, is so shortened as to leave scarcely a mark on the dial of life. "Young America" lies down a boy, passes his youth in a fitful dream, and awakes to think himself a man. One is tempted to apply to these boys in so great haste to be men, the lines addressed by Wordsworth to a child:—

"Why with such earnest pains dost thou provoke
The years to bring the inevitable yoke,
Thus blindly with thy blessedness at strife?"

It must not be understood that, because so many irregularities exist, the standard of scholarship is low everywhere in the South. On the contrary there are a few universities whose standard is high, and a good many colleges whose standard, to say the least, is highly creditable. It is freely admitted that many institutions called universities or colleges in the South, as at the West, have no just claim to this distinction; and yet even these are struggling to meet the public demand for better instruction

and sounder scholarship. That there has been considerable improvement all along the line and in all grades of schools in the past decade, is a good reason for expecting that this spirit of improvement will continue to contribute to the elevation of the standard of both scholarship and culture. Taking all the conditions of the situation into consideration, there is, in the progress made and the greater advance promised, good ground for congratulation and encouragement.

III.—THE COLLEGE CURRICULUM.

The courses of study have already been incidentally discussed. Enough has been said to show that it is no easy task to compare college courses North and South. Only a few of our Southern universities have a curriculum embracing the four historic classes—Freshman, Sophomore, Junior, and Senior; and many colleges are organized on the “school” instead of the class system, graduation being required in a certain number of “schools” for the degree of A. B., or B. S., or B. Ph., and in a larger number for the Master’s degree. This plan offers to some extent the privilege of electing studies; and it is claimed by its advocates to be promotive of thorough scholarship. The curriculum colleges as a rule offer a choice of courses (usually two, classical and scientific,) and a number of these institutions have a scheme—usually quite limited—of elective studies in the two higher classes. But want of adequate endowment prevents some of the colleges from introducing elective courses and studies, this system having already proved too expensive in a few cases where it has been tried. Want of equipments means usually less attention to practical work in mathematics and natural sciences. These branches are taught in many colleges only theoretically, and this, too, when the changed industrial condition of the South demand increased attention to the natural sciences and their applications. The people of the South have not realized in their own experience, to the same extent as the people North, the importance of some questions in political economy and sociology, and it is safe to say that these topics receive less attention in Southern than in Northern colleges. It may be said of our colleges in both sections that they have shown a willingness to yield to the reasonable demand of the public for practical, as well as for theoretical and disciplinary, education. Hence the greater attention now given to the natural sciences, modern languages, political economy, and kindred studies. Among the good results of the discussion of the traditional curriculum may be mentioned the large place now given to English language and literature in nearly all of our colleges at the South, as well as at the North. Certainly English should have the first place in every school for youth who expect to use that language for life.

The modification of the old curriculum has been marked within recent years. Even in conservative Yale, changes have been made which would have met with small favor in 1878, when President Porter was preparing the second edition of his admirable work—*American Colleges and the American Public*. That this modification has been carried so far in some quarters as to be pronounced revolutionary must be frankly admitted. While many, even among the friends of Harvard, believe that this honored university has gone too far in the introduction of electives, it would be wise in many critics, before passing hasty judgment, to consider the thorough preparation necessary to gain admission to the Freshman class; and that the applicants, although averaging 19 years old and coming from the best endowed academies and the best high schools in this country, are subjected to so rigid an examination that from 8 to 10 per cent. of the candidates fail to pass the ordeal successfully. These examinations at Harvard, which are the most difficult of the kind in this country, may now be divided, a part being taken a year in advance and the remainder just before the candidate enters.

It cannot be doubted that the unwise multiplication of weak colleges has injuriously affected the curriculum and has made degrees, both regular and honorary, far too cheap and common in some parts of the South, so that "college graduate" has come to be a term of rather vague signification. And this folly has also had a tendency to depreciate in the minds of the people any proper standard of qualifications for a professor's chair. Where else in our country is almost every teacher, even of a common school, dubbed "professor"? And where else, unless in the West, do we read advertisements and "puffs" of schools and colleges, weak in every respect, yet claiming to have "full and able faculties," to provide "facilities of the first class," to have "courses of study as high as the highest," to give "advantages *second to none*," and so on *ad nauseam*? The modest statements made by the best universities and colleges in their catalogues and advertisements would prove wholesome reading at some institutions. Only a few months ago, I received a catalogue of a college in Tennessee that enrolls a considerable number of students and confers on some of them A. B., B. L., and B. S.; and yet this document of nearly forty pages is a specimen of English so execrable and "clap-trap puffing" so unblushing as to be both amusing and disgusting. Quite recently I received from the head of a college in the same state a letter requesting me to assist him in writing a book; but with the letter came a specimen of his use of the English language that would itself have decided me not to be bound up in a volume with such literary (?) company.

The constant expansion of the "curriculum," which Thwing in his *American Colleges*, pronounces "the most delightful feature of the history of college education in America," has not been so marked in Southern as

in Northern colleges. There is, however, an earnest effort making by the best universities and colleges in the South, to improve the standard of education, not only by requiring more thorough scholarship on the part of candidates for degrees, but also by broadening and elevating the courses of study leading to degrees. That these courses—pursued in many cases by pupils of irregular and inferior preparation—are so crowded with studies as to aggravate the evil of cramming and leave but little time, even to the best students, to acquire literary taste and culture, is generally recognized by thoughtful teachers as a defect that must be remedied. There is, also, a growing tendency towards uniform methods in the work of higher education, and this tendency is likely to receive impulse from the gradual improvement of the public school system throughout the Southern States. Sooner or later there must be a more intimate connection between the public high schools and the colleges. Another decided gain is noticeable in the higher attainments required of the professors in our best colleges, and the increasing number of graduates of Southern schools who seek the best university advantages offered in this country and in Europe. This means that a higher degree of literary culture is to prevail at many of our seats of learning.

A few words in conclusion. To discuss with any degree of satisfaction a subject so comprehensive as that presented in this paper, one should have ample time for study and comparison. It has been impossible for me to discuss all important points; and I am sensible that the task assigned me has been imperfectly performed. It is too much to expect that what has been said will meet the views of all parties. A Southern man by birth and education, I know very well how sensitive many persons are on questions involving a comparison of the North and the South. My life has been spent among Southern people, and since my graduation—fifteen years ago—has been given to the service of my *alma mater*; and hence I know from long and anxious experience how to sympathize most fully with the people of the South in the losses of the war and in their subsequent struggles to improve and strengthen their educational institutions. It would have been a more agreeable task in this discussion to praise and please by magnifying what we have, and what we have done, in the South, and omitting any comparison that would show us at a disadvantage; but after careful study of the situation and extended observation in both sections, I am convinced that the best service a true son can render the South is to show what remains to be done, to point out imperfect methods, and to suggest plans for making needed improvements.

I would not be understood as favoring the concentration of our higher institutions to the extent of having only a few great universities and a few large colleges. The small colleges are needed as well as the large ones. A college may be small, and yet strong and useful in good honest

work ; it may be large, and yet so weak as to be unworthy of being classed among colleges. The tendency of institutions to become more expensive as they grow larger and richer, is a tendency that should be checked. The cost of attending some of our largest American institutions would prevent a majority of Southern college boys from enjoying the superior advantages offered. While readily granting that many colleges are needed in this great country and that new ones may be demanded by increasing population in the far West, one may still regret that in some states the number needed has been far exceeded, and that some of the newer states seem to profit so little by the experience of the older sections of the country. It is to be regretted, too, that in nearly every state it is so easy a matter to have any school chartered as a college, with power to confer degrees. The time has come when this whole subject should be fully and frankly discussed in all its bearings in the hope of bringing about a better state of things. The better class of colleges in a state or section should organize associations for the discussion of college work, the correction of evils, and the advancement of higher education. Such an organization exists in New England and another in Ohio ; and similar associations throughout the country might produce good results in shaping public sentiment, if not in securing suitable legislation.

PROCEEDINGS

AND

ADDRESSES

OF THE

NORMAL DEPARTMENT.

NORMAL DEPARTMENT.

OPENING ADDRESS ON THE DISTINCTIVE PRINCIPLES OF NORMAL SCHOOL WORK.

BY ALBERT G. BOYDEN, PRESIDENT.

Fellow Teachers :

I invite your attention to a few thoughts upon the distinctive principles of normal school work. The time has been when we were called upon to answer the question, Does the normal school differ from the academy or a good high school? Even in this association we have discussed the question, How much of the normal school work is really normal and how much is academic?

To-day the question is, What are the distinctive principles of normal school work? The existence of such principles is recognized, and their enunciation is called for. A sound theory is the guide of successful practice in education as in every other department of human effort. "Theory is the knowledge of the principles by which practice accomplishes its end." "There is no practice without a theory," for every man, to some extent, thinks of what he is doing. The more capable and thoughtful he is, the more fully he reflects upon what he has done, the more carefully he considers what he is to perform. As he proceeds in his practice, and reflects upon his performance, his theory gains distinctness and thus becomes the guide of his practice.

In seeking for the distinctive principles of normal school work we ask first, *What is a normal school?* In the language of Webster's unabridged, "a normal school is an institution for the education of teachers." It is not an attachment to a high school, an academy, or a college, but an institution by itself, having a local habitation and a name, equipped with its corps of instructors, courses of studies, and the necessary appliances for accomplishing its object. Its sole work is the education of teachers. The public school, the academy, the college, seek to educate the man; the normal school seeks to educate the man to be a teacher, an educator.

In setting this standard for the normal school I am not unmindful of the training school, the normal department in the academy, or the normal

school with the academic department, or the chair of pedagogy in the college. I heartily appreciate the good work which many of these are doing. I know the difficulties which the normal schools have had to surmount, and with which in many states they are now contending in demonstrating their right to existence and support.

The school for the training of nurses is not sufficient to prepare the medical practitioner for his work. The subordinate department in a school, the single chair in the college, is not considered sufficient to prepare for the practice of law, medicine, or the clerical profession. No more should they be regarded as furnishing adequate preparation for the teacher's profession. These may be the best thing attainable at present in many places, but they should be regarded as preparatory to the true normal school which is ultimately to take their place.

Why is an institution for the education of teachers called a *normal* school? A thing is normal, according to Webster, when strictly conformed to those principles of its constitution which mark its species. Tried by this test the education of the child and of the teacher is normal when strictly conformed to the laws of the physical and rational nature of man. An institution whose sole purpose is to educate teachers according to this standard is properly called a normal school.

Second, we ask, *What is the distinctive work of the normal school?* We have said it is to educate teachers according to the normal standard. How shall we find this standard? By a careful study of human beings we may learn the structure, functions, and hygiene of the human body; the powers of the mind, the order of their development, the objects upon which they should be employed, how they are called into right activity, and the products of that activity as they crystallize into those habits of thinking, feeling, and willing, which constitute good character.

Through this study of body and mind we may discover the laws of our life, and may derive those principles of education which should guide our practice in the education of teachers and children.

To educate a child is so to direct and control his activities through childhood and youth as to bring him into that state in which he will make the best use of all his powers. Education means training for an endless life. Lives are to be dealt with.

The means by which this end is to be accomplished is the trained teacher, supported by intelligent and sympathetic supervision, teaching every child, by means of the course of studies, to see distinctly, to use his hands intelligently, to hear accurately, to remember easily, to imagine vividly, to think logically, to speak correctly, to read the thoughts of the author, to write perspicuously, to feel, to act, for the highest and whole good of his nature.

The education of the normal school student for this work requires that he should have

1. As definite and full knowledge of the human body and mind as possible, that he may distinctly comprehend the principles of education.

2. That he should be able by careful observation to discover quickly the peculiarities of each child.

3. That he should make a careful study of the art of teaching, that he may know distinctly how to excite right activity and knowledge in his pupils, as dependent upon

The knowledge of mind, the knowledge of the individual pupil, and of the studies which are used in teaching.

The selection of the proper objects of study for teaching.

The natural and logical arrangement of these objects of thought.

How to bring the objects of thought distinctly before the mind of the learner.

How to secure his voluntary attention to the objects present.

How skillfully to direct the pupil's observation, thought, and power of expression so that he will acquire himself the idea of the object and its correct expression, and make such a recapitulation of what has been taught as to show the relation of the parts to one another and to the whole.

How to secure the proper study by the pupil of what has been taught.

How to make systematic and thorough examination of the pupils in what they have studied.

How to conduct criticism by the class and the teacher.

How to make daily preparation for school work, and

How to secure his own general culture.

4. That he must have a thorough knowledge of the course of studies for the elementary and for the scientific work.

That he may know what studies should be included in the course, and why these subjects should be studied.

That he may know in what order the studies should come, and the relation which they hold to one another.

That in each study he may be able to analyze the whole subject into its main divisions, these into their subordinate divisions, to consider the parts in the order of their dependence, and to teach and drill the class in the whole subject.

5. That he should thoroughly examine the subject of school organization.

That he may know what it is to organize a school; the advantages of a good organization; the preliminary preparations for opening a school; how to open a school; how to classify pupils; how to apportion the time and studies; what provisions to make in relation to order.

6. That he should carefully study the teacher's moral duties with reference to the need of moral education; the object of it; the principles of government; school government, its necessity, and how the end of school government shall be secured; the effect of the proper arrangement

of school exercises ; the effect of good management and its requisites ; what motives shall be used and how they shall be employed in governing the school ; the teacher's personal habits, and his spirit.

7. That he should study the history of education to learn what has been done, and what men have failed to accomplish.

8. That he should acquire such a degree of skill in the application of these principles and this knowledge, as will enable him to organize and control his own school and to educate his pupils.

It is the distinctive work of the normal school to secure to its students this knowledge and skill according to the measure of their ability.

The first distinctive principle of normal school work is the thought that the normal student is to be a teacher, and as far as possible an educator. This thought should give tone to all the operations of the school, from the beginning to the end of the course. The normal student should be led to look at the course of studies, the acquisition of knowledge, the teaching, all the exercises of the school, his own spirit, purpose, manners, and conduct from the teacher's point of view. This makes all the work professional and the school becomes a normal training school in all its course.

The second distinctive principle of normal school work is the thought that the normal student is to be educated for his work, not merely furnished with the knowledge of subjects and a set of methods, but he is to master the subjects, prepare his illustrations with special reference to teaching, come into the class, teach, and do all the kinds of class work that will be required of him in his own school in the education of his pupils. After the normal student has been trained in this way to teach philosophically, in as full a measure as time will permit, he should come, in the latter part of the normal school course, to the careful study of the physical and rational nature of man and learn the philosophy of his work by finding the principles which underlie the method he has learned to use.

This should be followed by the thorough study of the art of teaching, the course of studies, school organization, school government, and the history of education. When the student has passed through this course in the normal school he is prepared to go into the different grades of the practice school, as an assistant under the direction of the model teacher.

The third distinctive principle of normal school work is the thought that the method of instruction in the normal school is to serve as a model for its graduates. Not that it should be followed literally in all points, but in the arrangement, the principles, the spirit, and the manner of conducting, it will be imitated. The unconscious tuition of the school is in some things more potent than the conscious teaching. It should be worthy of imitation.

Well defined principles, followed with the persistency and courage of strong convictions, are the only sure basis of successful normal school work.

REPORT OF THE COMMITTEE ON ORGANIZATION, COURSES OF STUDY, AND METHODS OF INSTRUCTION IN THE NORMAL SCHOOLS OF THE UNITED STATES.

BY A. R. TAYLOR, PRESIDENT STATE NORMAL SCHOOL, EMPORIA, KANSAS.

The material for this report has been gathered from every reliable source within reach. Inquiries covering thirty-five leading points upon which information was desired, were sent to the Normal Schools of the United States. Very satisfactory answers were received from about fifty. An examination of the list shows that scarcely a single representative school failed to respond. About thirty states reported and the committee flatters itself that there is little desirable information on the first two points designated in its title, which was not placed at its disposal. It was not expected that much would be done this year on the third point: Methods of Instruction.

There are about 260 normal schools, so-called, in the United States,—the number having more than doubled in the last ten years. 103 are supported by the state, 2 by the county, 22 by the city, and the rest by other agencies. It must be borne in mind, however, that some of the State Normal schools are but summer normal institutes. North Carolina reports ten State Normal schools, whereas seven of them hold summer sessions only; the three remaining (colored) holding a winter session of from five to seven months each.

The normal schools and universities, so-called, supported by other agencies are, with fewer exceptions than I could wish, misnamed. They are not training schools in the strict sense of the word, but have a multiplex organization. The catalogue of one before me announces a Normal department, a business department, a music department, a law department, a medical department, a theological department, an art department, a department of telegraphy, a department of photography, *et cetera*,—nearly twenty in all. We have no fault to find with these dear brethren for undertaking so much work, but must insist that the appropriation of the term Normal for the naming of such schools is unfortunate and unwarrantable, derogatory to the highest interests of our educational system. It produces confusion in the minds of the people and retards the

growth of the true normal school. There is no more reason why most of them, if they do the work proposed, should be called normal schools than that they should be called schools of law, of medicine, or of theology. Some of them may be doing a great work, but they would do a greater, if sailing under the proper flag. Few of them saw fit to respond to the inquiries of your committee and the information has been gathered from other sources. In general, however, it may be said that as far as their means and facilities permit, they are striving in the Normal department to cover the field attempted in the training schools proper. It is but due most of them to say, perhaps, that, "being untrammelled," they are exceedingly liberal in their requirements for admission as well as for graduation, and that, as they do not propose to make scholars, they exhaust each subject undertaken with much more ease and despatch than the more conservative schools.

Of the fifty schools furnishing materials for this report, three are private, four are city, and forty-three are state schools. Except when otherwise stated, the deductions drawn are from these reports. Nearly all of the state normal schools in the United States are supported by legislative appropriations and fees from pupils in the various departments. Forty-one of them receive \$10,000 or more per year from such appropriations, and eleven over \$20,000 each. The Ypsilanti Normal School receives also the income from a fund of \$70,000 belonging to it. Wisconsin has a Normal School fund of over one and a quarter million dollars, the proceeds of the sale of certain public lands, from which it receives an annual income of about \$90,000. This sum is used in Normal work and distributed among its four normal schools. The State Normal School of Kansas has \$182,000 productive endowment, the proceeds of the sale of certain public lands, which will soon be increased by the sale of lands recently set apart, to \$250,000. The Hampton Normal and Agricultural Institute of Virginia receives one-third of the income from the congressional grant to agricultural colleges.

In some schools, those of Pennsylvania for instance, the ownership and control are vested jointly in the state and in local private corporations of stockholders. In addition to a small appropriation, fifty cents per week is paid for each pupil in the Normal department, and \$50 to each graduate who pledges himself to teach in the state for two years. In some of the southern states the appropriation is supplemented by additions from the Peabody, Slater, and other funds, and by private subscriptions. The Sam Houston Normal School of Texas, for instance, receives \$18,000 per year from the State and \$6000 from the Peabody fund. In other cases, as in Plymouth, N. H., the town bears part of the expense of supporting the school. The expenses of the city normal schools are generally paid out of the regular school fund.

The board of control is variously appointed and constituted. In Maryland, Massachusetts, and other states, the state board of education constitutes the board. In Illinois one of the two schools is under the supervision of the State Board of Education. In Michigan it is elected by the people; in New Jersey by the legislature; in New York it is appointed by the state superintendent of education; in California and Kansas by the governor of the state. In Vermont it is self perpetuating. In Maine and others, the Governor and other state officers are *ex officio* members.

The normal schools have no organic relation with the public schools, though directing so largely their organization and methods. The graduates of the city normal schools, N. Y., for instance, are supposed to be furnished employment as soon as suitable vacancies occur. As the other normal schools exist only to furnish teachers for the public schools, it is very desirable that there should be the most cordial good will and co-operation between them. The diplomas of eighteen of the fifty schools reporting are certificates to teach; those of Alabama, San Francisco, Colorado, Michigan, New York, Kansas, and others becoming life certificates at once; some at the expiration of from one to three years, while those given by the state schools of Texas, Maryland, Pennsylvania, and Wisconsin become life certificates when countersigned by the State Superintendent. The President of the State Normal School of Maryland is *ex officio* State Superintendent of public instruction. Eleven of the fifty confer degrees; those of Pennsylvania and Iowa the degrees of B. E. and B. S. and those of Missouri the degrees of B. D. and M. D.

The tuition is free to those taking the pledge to teach, though in about all an incidental fee is charged in the lower classes. We have already mentioned the aid given students in Pennsylvania. The Commonwealth of Massachusetts appropriates the sum of \$4000 per year, which is divided among the students attending the several normal schools. It assists them materially in defraying expenses. New York pays mileage to her pupils. Rhode Island pays mileage to students from outside a radius of five miles from her normal school, and Kansas pays to those coming from outside a radius of 100 miles. Perhaps a third of the schools board their pupils, reducing their expenses somewhat in this way. The normal schools of Pennsylvania, New Jersey, and a few other states have large and commodious halls for such purposes. The State Normal School of Texas is organized somewhat upon the plan of the Military Academy at West Point. Pupils are boarded and supplied with books free. Each senator and representative is permitted to appoint one candidate each year, the candidate being selected by competitive examination on questions furnished by the faculty.

In Missouri, Wisconsin, Minnesota, Indiana, Illinois, Kansas, and

other states, the presiding officer is called the *president*; in New York, Pennsylvania, Massachusetts, Nebraska, and others, the *principal*. Outside a few generally recognized chairs, such as Mathematics, Natural Science, *et cetera*, the members of the faculty are assigned to chairs, which seem to suggest their favorite subject among the three or four which they teach. In five, the offices of director in training and of principal of the model school are combined in one person. In a few others, it is probable that the term principal or superintendent of model school indicates the same duties. In several, the supervising teachers in each of the three departments of the model school,—primary, intermediate, and grammar,—are designated as principals or head critics of their respective departments; in others as critic teachers. In some, the teacher of methods seems to have little connection with the model school other than as observer and critic of the work of pupil teachers. In a few schools, several members of the faculty share the work in methods,—probably only as it is related to the branches upon which they give instruction. Eight schools, among them San Francisco, Terre Haute, Ind., Cedar Falls, Ia., Fredonia, N. Y., New York City, Emporia, Kan., Winona, Minn., report regular kindergartners employed as members of the faculty. In this connection it might not be out of place to say that the duties of the director of training at the Kansas State Normal School are to supervise the model school, assign all of the pupil teachers to practice work, furnish them with full suggestions as to work required and methods to be pursued, preside at the general and grade meetings of the regular and the pupil teachers of the model school, give instruction in outlines, school supervision, and school law, and direct all of the work in physical training.

About four-fifths of the schools reporting call from one-half to two-thirds of the curriculum academic, and the rest professional, though in many cases the statement is made that nearly every subject is taught with the wants of the teacher constantly in view. This is particularly true of the common branches. Some principals exalt the method side so largely as to insist that no part of their work should be classed as academic, though the courses of study in their schools contain about the same list of subjects as those of other schools. Of the Massachusetts principals, one reports that no part is academic, two say that no part is purely academic nor purely professional, while a fourth says that the work of the first year is largely academic. Of the Wisconsin principals, one says that the physical sciences and a few other subjects are academic,—while the professional include those formally so named and the common branches which are treated in reviews largely from the professional standpoint: another says that two-thirds of the work is academic; while a third reports that no part of it is academic. When it is remembered that all the

schools in each of these states are under one board of control it would seem that there is room for a convention in each to interpret and name the course of study provided. There is very general agreement on the part of the New York principals that the last year only in their course of study should be called professional. In the Normal School of New York City the first two years are called academic and the last professional. In the San Francisco Normal School all of the course of study is called professional. In spite of some confusion of terms it seems fully established that the instruction in our best normal schools during the first two-thirds of each course is largely with the knowledge idea only in view, methods interpenetrating as opportunity offers and ability of pupils permits. In some schools the distinction of academic and professional is not recognized. This seems unfortunate, for some such differentiation is needed in discussing professional problems. In many cases the distinction has been put away in response to a cry that normal schools are not doing legitimate work, when in reality no perceptible change has been made in the course of study or in methods. Reviews in the common branches and original work in other subjects may be as essential to the complete preparation of a teacher as is similar work in chemistry and anatomy in a medical school, or history and Hebrew in a theological school. It is questionable whether the common schools ought to be required to give the average pupil as thorough instruction as the medical, law, or normal schools can reasonably require as a basis for professional instruction. No other scheme yet devised has afforded so fine an opportunity for impressing fundamental principles and imparting methods as that in which the pupil receives the instruction from one who keeps his special needs ever in view.

Sixteen of the fifty provide professional work in the way of special observation in the first year of the course. About the same number group it all in the last year, while perhaps half as many begin it sometime in the middle year.

Over one-third of the schools have two terms per year; about the same number have three, and a very few have four. The courses of study are designated as elementary, English, scientific, Latin, classical, etc. Very few provide elective courses, but in some schools substitutions are permitted. Over one-half have two year courses, nearly one-half three year courses, while a few provide a four year course also. The courses of study name in the main about the same branches, though the time spent upon each subject and the degree of proficiency required is various. The common branches are included in all. Of the physical sciences, botany, physics, and physiology are included by nearly all of the schools; chemistry is included by two-thirds, and zoology and geology by about one-half in their three and four year courses. Astronomy is named occasionally. Drawing is found in more than two-thirds of the courses. Mathematics

is generally pursued through plane geometry and in eight schools through trigonometry and simple work in surveying. Two-thirds of the schools place English literature and general history in their advanced courses. The study of language is exalted in nearly all,—rhetoric, including the elements and the science seldom being omitted. Latin is included in the course of study of over one-half of the schools, German and French in a very few, and Greek rarely. In about ten per cent. of the schools all of the pupils graduating take Latin. In nearly one-half from five to fifty per cent. of the pupils take Latin, while in about twenty per cent. it is not taught at all. In the New York City Normal School all pupils take Latin, two-thirds take French and one-third take German.

Two-thirds of the schools name methods, psychology, and school economy as distinct branches of study; one-third name science of education and one-half name history of education. School law receives its due share of attention in nearly every school. Over one-third give some attention to manual training, principally however, in the making of simple apparatus, in drawing, and in clay modeling. In the Massachusetts schools, several full sets of wood worker's benches and tools are supplied. In the normal schools of the South this work, as well as the industrial proper, seems most wise as at Hampton, Va., and Marysville, Tenn. About one-sixth of the schools report no attention to physical education. In some, the work is largely in the way of lectures. Several have gymnasia, fairly supplied with apparatus, and perhaps two-thirds require pupils to take calisthenics and gymnastics daily. In the Baltimore, Maryland, Normal School, military drill is provided for the young men. In the State Normal School of Kansas the pupil teachers lead the divisions in calisthenics under the supervision of the director in training.

In more than two-thirds of the schools, some kind of provision is made for practice work in teaching. In more than one-half, regular model graded schools are organized. These schools are generally under the supervision of the director in training, or of some other teacher. In nearly all, each department is under the care of a trained teacher who also acts as critic teacher over pupil teachers sent to that department for practice. About one-sixth of the model schools include high school work in their course of study,—some fitting pupils for college, but generally speaking they provide work only in the primary, intermediate, and grammar school grades. Six have kindergartens more or less modified after the American idea. Four (Terre Haute, Ind., Bridgewater, Mass., Dayton, O., and Johnston, Vt.,) have partial or complete control of lower grades in city schools, and one (Plymouth, N. H.,) has control of the whole system. One calls in primary classes from city schools for object lessons. In a few, a small number of pupils is received; in others, the number is limited only by the capacity of the rooms used. About one-

half charge a tuition fee of from \$5 to \$15 per year, in the model school. The work of pupil teachers is generally supervised and criticised by a director in training and methods, and by the teachers in charge of the different departments of the model school, though in some cases it is all under the immediate direction of the principal of the normal school, the regular teachers in the school observing and criticising the work of the pupil teachers in their own subjects. It is perhaps unnecessary to state that most of the normal schools strive to make these schools for practice, models of similar grades in the public schools, that grade and general teacher's meetings are held regularly, reports presented and discussed, and suggestions in methods and management freely offered. Model lessons are given by members of the class and by members of the faculty. The blank reports filled out by observers and critics oftentimes furnish abundant and fruitful material for discussion. Eleven schools require graduates to teach at least fifty hours in the practice schools, seven require 400 hours, while the thirty-seven reporting on this item require an average of 165 hours. A number simply require enough to satisfy as to ability to teach. In five, graduates are required to take kindergarten work also. Thirty-six admit pupils on passing a fair examination in the common branches. A few admit on certain grades of teacher's certificates and on diplomas from high schools and colleges. In more than one-half, the examinations are written; in three, entirely oral; in the rest both kinds are given. An age limit of from fifteen to eighteen years is fixed by many schools, though its reason is not apparent. In a few (Carbondale, Ill., Cedar Falls, Ia., Massachusetts, Minnesota, Michigan, Missouri, and Kansas, final grades are accepted from certain schools for corresponding work, though in most cases simply from state schools proper. In New York the Regents, certificates are accepted. But *one* throws down the bars and announces that grades are accepted from any reputable school. A few schools report as many as fifty per cent. of their pupils passing at once to advanced classes on examination. The others generally report from two to fifteen per cent., though California reports one-fourth, and Michigan and Texas one-third, Massachusetts and Maine report none.

Nearly two-thirds of the schools report excellent facilities for illustration in the natural sciences. These include botanical, zoological, geological, and mineralogical collections, and physical and chemical apparatus in variety. In some few, these supplies are almost as liberal as in our best colleges. About one-half are well equipped with apparatus for successfully illustrating primary work, and nearly as many report a good line of models, casts, and designs for use in the drawing department. A little less than one-half report good libraries, well adapted to the specific object of the school, the number of books in some cases reaching as high as 6,000. The states have been, almost without exception, generous in

providing buildings suitable for the purposes of the schools. In many cases really magnificent structures have been erected, and have been equipped in such a manner as to attest the most unqualified confidence in the work of the true training schools. The buildings and grounds of the State Normal University at Normal, Ill., are valued at \$140,000, though the buildings alone cost originally more than that. The Kirksville, Mo. State Normal School values buildings and grounds at \$150,000, Warrensburg, Mo., at about \$200,000, Indiana, Pa., at \$200,000, Ypsilanti, Mich., at \$117,000. Its library, museum, and apparatus at \$16,000. Reference has already been made to the use of the terms academic and professional. In the use of the terms, theory, art, and science of teaching, pedagogics and methods, there is in general little difference in practice. In defining each there is more of a difference even among the doctors than is desirable, though perhaps this should be expected from independent workers in a growing science. Col. Parker says that "the science of teaching is the scientific arrangement of the laws of human development. Pedagogics and the science of teaching are identical. Methods is the application of the means of human development. Theory is the science, art the application." Dr. Hoose, of New York, says that "the process of discovering the faculties and the nature of the subject matter that is to be adjusted to them is the conception of the science of teaching. Methods of teaching are principles of adapting subject matter to the capacities and powers of the pupil. Pedagogics is the science and art of developing man in his relation to the family, to society, and to the state. Art is the conception of the way in which the science is applied."

Principal Palmer, of New York, says that "the science of teaching is the reduction of the facts observed in the development of consciousness to law. Methods are application of the laws of mental growth to the means and ends to be reached. Pedagogics embraces science, methods, general management of the school, etc. Theory and art are synonymous with science and methods." No one seems more happy in his definition of the terms as used in his school than Dr. Baldwin of the Lone Star state—"Education is the science of human development. Teaching is the art of promoting human development. Methods are the ways in which educational means are used to reach educational ends. Pedagogics is the profession of teaching and includes education as a science, its history, and its literature, the art of school management and the art of teaching." Dr. Hunter, of New York City, gives what seems to be the most general use of the term academic, as a term applied to those studies which are "employed to cultivate mental faculty in contradistinction to technical studies which are employed to learn a trade or profession."

The question, "What concerted action should the normal schools of the United States take in order to raise the standard and increase the efficiency

of their work?" brought among others the following suggestions which seem worthy your consideration :—

1. That the diploma of every state normal school should be a life certificate to teach in the state where issued.

2. That the public normal school should be given the right to license all teachers, as is done so generally now by the schools of medicine for the medical profession.

3. That they should agree upon and formulate a body of pedagogical principles.

4. That the work of all normal schools should be strictly in the line of fitting and training teachers for work in the public schools.

5. That they should insist upon thorough scholarship for teachers and show the people in what way the normal schools should be equipped for their successful preparation.

6. That they should insist upon professional training as a requisite for eligibility to educational offices.

7. That as a means to the above and other ends, a system of correspondence and publication should be established by which a free interchange of views and of reports in experimentation might be secured.

No one thing surprised and pleased your committee more than the manifest unity of purpose and the general agreement as to the means which should be employed, that exist among the normal schools of this country. What differences appear, may readily be accounted for when the difference in the demands made, the surroundings, and the facilities, are considered. Two ideas are usually embodied in their organization, *the education and the preparation of teachers*. In a few cases it would seem that teachers were to be prepared for the country schools and for grades below the high school, but a broader field is open to nearly all of the normal schools. The advanced courses are becoming more popular, young men and women of fine scholarship, as well as of liberal professional training, are found in many schools. Perhaps in no class of schools has there ever been such prompt and persistent effort toward the raising of the standards for admission and graduation. From what was at first very necessarily a mechanical sort of a pedagogy, there is rising a body of accepted educational principles and methods whose wisdom commends them to liberal minded people everywhere. The empirical character of our work is rapidly giving place to something more rational, more systematic, more satisfactory to us and to our patrons. These are great days for teachers. All the world has gone to studying pedagogy and the normal schools are directly reaping the benefits.

It has been charged and perhaps partly substantiated, that normal schools are not so particular about securing men and women of profound scholarship for their various chairs as are the universities and colleges.

How largely this has been forced upon them by small allowances for salaries or by the desire to secure instructors of great teaching power rather than of great scholastic knowledge, is not clear. There is, however, not the same room for such a charge now, for as far as means permit both conceptions are generally obtaining in securing teachers for these schools. It never should have been otherwise. Teachers in all grades of school work should have a liberal education. We are pleased to say that they should have a thorough acquaintance with the nature of mind, the laws of human development, and with the most approved means for securing the harmonious growth of the child; and that they should have that command of the sciences, of the arts, and of letters, which would give them abundant resources for illustration and experimentation. If all this be true, how liberally equipped should be the man or woman who proposes *to train teachers*! No other class of schools makes such imperative demand for faculties of broad culture and of rare teaching power. The mission of the normal school is to make teachers, but teachers can only be made out of intelligent, thinking men and women. To this end the academic side of our work must be exalted and put in proper correlation with the professional. Every means which may be needed in a college to facilitate the acquisition of knowledge, and promote breadth of scholarship is demanded as imperatively here.

REPORT OF THE COMMITTEE OF EDUCATIONAL VALUE OF COMMON SCHOOL STUDIES.

The report of the committee on the Educational Value of Common School Studies consists of three papers, one prepared by each member of the committee that was appointed at the meeting held at Saratoga Springs, in 1885. The three members of the committee are, Dr. J. H. Hoose, Dr. W. H. Payne, and Dr. Edward Brooks.

I.—BY DR. J. H. HOOSE, CORTLAND, N. Y.

The chairman submitted last year a paper on the subject of educational values. That article limited its scope to an investigation of educational values when estimated from the nature of the subjective products — mental conditions and states — which arise in the mind of him who pursues the branches in question. The limitations of the investigations exclude all considerations of utilitarian values; hence the historical method of treatment of the theme, and the methods that estimate the practical values of studies are not permitted to be introduced. The scope of treatment followed in the introductory paper read last year, and continued in this paper, still introductory, is complex in its conception; it examines subjective states, conditions, habits, but excludes rigidly all investigations into the utilitarian values or practical uses of those psychical states. Yet the complexity of the theme will yield gradually to him who approaches it from the stand-point of the scientist, but not to him who approaches it from the stand-point of economics, e. g. The botanist, a scientist, studies plants as plants; he describes their form, their nature, their habits; the physician, a man of practical affairs, investigates the utilitarian value of plants when applied as remedies to the “ills that flesh is heir to.” The botanist, a scientific investigator, describes the nature of the wood that is produced by various kinds of trees; the mechanic and the engineer, men of practical life and affairs, estimate the utilitarian values of these several kinds of wood — their power to resist crushing pressure, to sustain weights, to take a polish, to withstand the action of the weather. The botanist says the oak wood is hard and heavy; the mechanic, a man dealing with utilities, says the wood of the oak is valuable in building ships. The chemist, a scientist, examines coal and pronounces it to be carbon — in its nature quite like the diamond; the economist, a man handling utilities, estimates the practical value per ton of coal as an article of fuel,

— while the lapidary, another man of utilities, estimates the value of the diamond when it is used as an ornament to adorn man in social life. The chemist, a man of science, describes the nature of hydrogen; the warrior, a man of practical affairs, estimates the value of hydrogen to inflate balloons to carry up into midheavens the scouts who shall survey the camp of the enemy. The geologist, a man of science, examines and describes a hill or a mountain; the practical eye of the strategist, a very utilitarian, estimates the value of the elevation for purposes of victorious battle.

These examples illustrate the difference there is between the province of the scientist and the province of economics. The scientist investigates the origin, the genesis, the nature, the growth, the qualities, the final causes, of facts or phenomena. Economics busies itself with none of these things — it is satisfied to know that this thing (coal) is good for this purpose (fuel). Newton knew the mechanism of the heavens, but the poor slave knew the utility of the polar star — it guided him as he journeyed nights towards the northward, the land of liberty.

The psychologist can investigate the nature and character of the products of intellectual life and activities in the same manner as the physiologist investigates the nature and character of the products of animal life and activities, or as the botanist the nature and character of the products of vegetable life and activities. But the psychologist must proceed by the methods pursued by the physiologist and by the botanist — he must investigate by scientific methods alone. These methods are difficult for the educator to adopt, because his methods have been those pursued by speculation, and they are traditional in form and in spirit. How would he rank as a botanist who should proceed to study plants from the exclusive stand-point of their prophylactic qualities? He would be valuable only to be dried and shelved in some herbarium, labeled, "vegetable specimen of the original botanical crank — warranted to be 'Simon Pure.'" Yet the methods of investigation pursued by this hypothetical botanist are in form essentially those followed by the educator in past and in present time — he has been and he is still an expounder of the utilities. While most fields of human research and knowledge have been differentiated into the scientific and the utilitarian, that of the educator is still undifferentiated and utilitarian.

The probable reason for this unscientific state of educational research is the native condition of psychological phenomena; they are ephemeral as individuals, yet they aggregate an appreciable, positive quantity — being much like mathematical differentials, inappreciable until summed by integral calculus. Besides, the world is commercial in estimating values. The province of the psychologist is strictly that of the scientist who investigates the nature of phenomena, but not their utilities. The

province of the educator, if it were properly differentiated, is that of the economist who investigates phenomena in order to discover their practical or utilitarian values. The psychologist records mental phenomena — their genesis, their nature, their character, their laws, and how these fitting phenomena become an appreciable mental product under the form of habits; he examines habits as products that are conditioned by the nature and form of the things done, the subject-matter studied or pursued; he is enabled by this analysis of habits to institute a comparison among habits, in like manner as a botanist compares the nature and character of different kinds of wood. The province of the educator, properly differentiated, begins at this point; he examines the relative values of habits of mind and of intellectual activities, when they are estimated by their worth to man as a member of social, civil, and economic life — in much the same manner as a pomologist selects marketable fruits. The teacher's province begins at this point, if it were properly differentiated; his professional qualifications include a knowledge of the researches recorded by the psychologist and of the arguments reached by the educator; possessing this knowledge, he attempts to realize in the child the inductions and deductions of the psychologist and of the educator.

The foregoing investigation introduces the province assigned to him who discusses the theme that stands at the head of this report — the value of each of the common school studies, viewed from the standpoint of the habits which they confirm in the person who pursues these branches. His province is purely that of the psychologist; he has nothing to do with the utilities of practical life — a field that belongs to the educator as such. The psychologist pursuing this inquiry starts out with these fundamental propositions: (1) Mental activity proceeds always under some form; (2) The form of the activity conditions the form of the habit; (3) The form of the activity is conditioned by the nature and character of the thing done — i. e., by the nature of the subject-matter pursued; (4) Habit is thus constituted of subject-matter (under the form of knowledge of it) and of form of activity; (5) Subject-matter and the form of activity conditioned upon it constitute the power that there is in any particular habit — i. e., this knowledge in this mental or psychical form constitutes the force that inheres in this habit; (6) Each and every form of subject-matter (i. e., branch of study or kind of work) conditions its own form of mental activity, or habit; (7) Hence the educational value of a branch of study or of a kind of work is measured by its capacity to form a habit and to give character to the habit — i. e., is measured by its capacity to form a habit and to give "stock" (character) to the habit, and education is habit.

The psychologist is now prepared to examine in detail each common

school branch of study and every form of work, by examining the peculiar habit of thought which the branch gives normally to him who pursues it; he will also examine how the normal habit of the branch or kind of work is modified by the form of the system under which it is taught to the pupil, and by the bent of mind which the pupil inherits from his ancestors. Having accomplished this work, the research of the psychologist is done. The educator may then step into the arena and examine the utilitarian value of each and every one of these habits.

Extended study of this subject enlarges the scope of it. Character is habits of choice, and habits are conditioned by the kind of work that is done. Manufacturing is characterized by division of labor; this division of labor limits the number of habits that a workman acquires—i. e., it limits the range of his thinking. May not this field prove fruitful for studying the phases or forms of mental activity that exhibit themselves in strikes, boycotts, and in anarchism?

But the limits of time and space set before the committee, and the form in which the report is submitted, forbid extending further their investigations upon this occasion.

II.—BY DR. W. H. PAYNE, ANN ARBOR, MICHIGAN.

I. *Definition*.—Value is the exponent of effect; and a subject has as many values as it has distinctive effects.

The effect of a study depends primarily upon its nature, and in a secondary degree upon the manner in which it is taught.

II. Studies serve three purposes: they furnish knowledge which is useful for guidance; their mastery leaves a reflex effect in the way of discipline; and they yield a possession which affords contemplative delight. Studies have therefore three distinct education values as follows:

Education Values	{	1. Practical.
		2. Disciplinary.
		3. Culture.

III. Studies afford the individual guidance, in either of two ways: *directly*, as when he makes a personal use of them; or *indirectly*, as when he enjoys the advantages coming from another's use of them. For ex-

ample, telegraphy is *directly* useful to the few who know this art, but *indirectly* useful to the whole world besides, who may be ignorant of the art. The direct practical value of reading is very great and so should be a universal study; while the direct practical value of legal knowledge is small and need therefore be attained by only a few. These practical values, the direct and the indirect, are inversely proportional.

IV. The pursuit of one subject may involve the mind in one mode of activity principally, and so leave a concentrated effect; while another may act in the way of diffusion, because it involves several modes of mental activity. These disciplinary effects differ in compass and degree, and may be distinguished as the *specific* and the *tonic*. Practical values and disciplinary values are not only not the same, but, as a rule, are inversely proportional; while the specific and tonic disciplinary values are always inversely proportional.

V. Studies whose effect is contemplative delight or mental satisfaction, have a culture value. They resemble the tonic disciplinary studies in the fact that they are diffusive in their action, seeming to involve the whole mind both on its intellectual and on its emotional side; but the result is different in the fact that it is a *possession* rather than a *potency*.

In any strict sense, history and literature are neither practical nor disciplinary subjects. They are chiefly valuable as means of general culture.

With these distinctions, this scheme of education values will stand as follows:—

Education Values.	1. Practical.	1. Direct.
	2. Disciplinary.	2. Indirect.
	3. Culture.	1. Specific. 2. Tonic.

III.—BY DR. EDWARD BROOKS, PHILADELPHIA, PA.

The solution of the problem of the educational value of studies is based primarily on a *correct conception of the nature and object of education*; and secondarily on the *relation of the branches of study to secure this object*. In attempting a solution of the problem, the first inquiry is, what do we mean by education? The second inquiry is, what branches of study are best adapted to secure the ends of education?

One of the simplest and most practical conceptions of education is presented in the following definition:—*Education consists in developing the powers of man and furnishing his mind with knowledge*. This definition

assumes the object of education to be twofold; *developing the powers* and *furnishing the mind*. The developing of the powers is called *Discipline* or *Culture*; the furnishing of the mind is called *Instruction*.

CULTURE embraces all of man's powers, physical as well as mental. Its object is the attainment of skill, strength, and efficiency in the use of every power or faculty. It includes the general and special development of the physical nature, the general and special development of the mental nature, and the co-ordinate development of mind and body in the arts and industrial occupations. It means culture of muscle, culture of mind, and culture of mind and muscle in their combined activities.

INSTRUCTION means a building of knowledge in the mind. Its fundamental object is information, learning, scholarship. It aims to furnish the mind with the facts and principles of science and art, and to produce what is called learning or scholarship. When instruction is properly given, it affords mental culture, but its primary object is attained when the acquisition of knowledge is secured.

To secure these two ends of education, *culture and learning*, we make use of knowledge. Each branch of study as originally developed by the mind sets into activity in its study the same faculties which produced it, and thus gives culture and training to those faculties. This result of culture would remain even if the branch of knowledge were itself forgotten. But each branch of knowledge may be retained in the mind, and thus becomes the furniture of the mind to be applied according to the judgment of the possessor. Hence knowledge is necessary for both cultivating and furnishing the mind.

From this conception of education, which is in the main the accepted one, it is evident that the first value of knowledge is that of *discipline* or *culture*. Mental power is developed by mental activity, and the branches of knowledge furnish this mental activity. As the muscles of the arm become strong by proper use, so any faculty of the mind becomes active and strong by bringing it into continued and regulated activity. Different branches of knowledge are adapted to bring into activity and give culture to different faculties of the mind. Thus botany gives culture to the power of perception, literature to the power of language, mathematics to the power of reasoning, etc. It is thus clear that the first element of the problem of educational values is *the value of studies for culture*.

Moreover, knowledge itself as information has a double educational value. As a mental possession it has an influence on the mind, an influence of refinement, strength, and wisdom. This influence of knowledge as possessed by the mind is also included under the word *culture*. The term Culture, as I use it, embraces the entire effect of knowledge on the mind both in acquisition and possession.

Knowledge also has a value for the *use that may be made of it*; for its practical application in discharging the duties of life. This value of the

use of knowledge constitutes the second element of the problem or its solution. The value of *use* as distinguished from the value for *culture* is often indicated by the expression,—the *practical value* of knowledge.

In respect to the kind and amount of culture, a question raised by the learned writer of last year's paper on this subject, it is here assumed that the question refers to a general and not a special education. It means that general culture which fits a man to engage with about equal ability in any of the ordinary occupations of life or to discharge any of its ordinary duties. It does not mean a training to horsemanship, or base ball playing, or wonderful feats of athletics, or any of a score of muscular or mental gymnastics that might be named. It means a normally strong and healthy body, and a well developed mind with faculties all working in normal and properly balanced activity. From this conception of the nature of education, the solution of the problem of educational values is reduced to two considerations; first, *the value of the different studies for culture*; second, *the value of studies for knowledge*. In other words we wish to know the value of a study *for its culture* and the value of a study *for its use*. Using the word *practical* in a specific sense, these two values may be distinguished as *culture value* and *practical value*.

This distinction, it should be stated, is by no means a new one. It was distinctly conceived by Plato, and has been more or less clearly understood by all the leading writers on education down to the present day. Mr. Spencer assumes it in his celebrated and superficial essay on "What Knowledge is of Most Worth," in which he says, "Acquirement of every kind has two values,—value as *knowledge* and value as *discipline*." Unfortunately, however, he limits his discussion almost exclusively to the *value for knowledge*, assuming that what is best for knowledge must be best for discipline, and thus attempts only a partial solution of the problem. Any attempt at a complete solution must regard both of these elements, *value for culture* and *value for use*. The basis of the solution is thus indicated in the following outline :—

Educational Values, $\left\{ \begin{array}{l} 1. \text{ For Culture.} \\ 2. \text{ For Use.} \end{array} \right.$

Or, stated in other words, it may be represented thus :—

Educational Values, $\left\{ \begin{array}{l} 1. \text{ Culture Value.} \\ 2. \text{ Practical Value.} \end{array} \right.$

Since writing the above I have read Mr. Payne's recent essay, "Contribution to the Science of Educational Values," and notice his distinction between *discipline* and *culture*, in which he seems to limit discipline to the training of faculty, and to mean by culture a something resulting from discipline and instruction. I have been accustomed to use the word culture as embracing all that is contained in both of these ideas. I mean by culture in this essay and in my educational works, the total effect of

knowledge upon the mind, both in acquisition and possession. It embraces the entire result to the mind of its activity in the pursuit and acquisition of knowledge, and the refining, broadening, and invigorating effect of knowledge as possessed by the mind. Knowledge as acquired, and in its acquisition, has a certain effect upon the mind, and we need some one word to name that effect; the word that seems to come nearest to it is *culture*, and this is the word that I have been accustomed to use to express that effect. I discuss the subject of educational values, therefore, under the two heads, *value for culture* and *value for use*.

I. VALUE OF CULTURE.

In determining the value of a study for culture we must know what faculty or faculties it sets into activity; and when several branches give activity to the same faculty, their relative values in the culture of this faculty must be taken into account. Moreover, we must know what faculties of the mind there are to be set into activity, and also the relative values of these faculties. All faculties are not regarded as of equal value; thus memory is not as valuable as imagination, or perception as valuable as reasoning. I realize that I am touching delicate ground, but I think most persons will agree in placing the artist above the scholar, or the philosopher above the observer, and in general that there is a difference in the educational value of the different faculties of the mind.

We must, therefore, from the standpoint of culture, determine four things:—1. The *faculties* or *powers* of the mind; 2. The *relative values* of these faculties; 3. The *Studies* which give activity and culture to those faculties; 4. The *relative influence* which these studies exert on the different faculties. Each of these will be briefly noticed.

Nature of Mind. The mind, according to a popular and generally accepted conception, embraces three great classes of faculties: the Intellect, or source of ideas and thoughts; the Sensibilities, or source of feelings; and the Will, or source of choices and volitions. The intellect embraces the several faculties of Perception, Memory, Imagination, Understanding or Reflection (embracing abstraction, generalization, judgment, and reasoning), and Intuition. Besides these faculties, so-called, we recognize the power of Attention, and also the gift or capacity of Language or ability of giving expression to the products of the mind. A further analysis leads to the recognition of an Aesthetic nature consisting of the combined action of intellect and sensibility in the sphere of the Beautiful; and also a Moral nature consisting of the combined action of intellect, sensibility, and will in the sphere of the Good.

Looking over the whole ground of mental activity with the purpose of selecting those powers which are the most important to the individual, and seem to be the most concerned in his education, I have been led to

select the following activities and capacities as the basis of estimating values for culture:—

MENTAL CAPACITIES.	{	1. Language.
		2. Perception.
		3. Memory.
		4. Imagination.
		5. Generalization and Classification.
		6. Judgment.
		7. Inductive Reasoning.
		8. Deductive Reasoning.
		9. Attention.
		10. Taste.
		11. Morals.
		12. The Will.

A closer analysis would present a more scientific statement of the mental faculties, but the selection I have made seems to be more appropriate for the object I have in view.

Scale of Faculties. Assuming this view of the powers and faculties of the mind as one upon which there will be substantial agreement, the next step is to decide upon the *relative values* of these faculties. That there is a difference of value will be readily admitted, for no one would place the great philosopher, who uses his reasoning powers, on the same plane with the naturalist, who uses only his powers of observation. The scholar with his strong memory, the poet with his vivid imagination, the philosopher with his creative thought, occupy different places in the hierarchy of talent. To exhibit this difference in the value of faculties we must fix upon some scale which will indicate, approximately at least, their relation to one another. So far as I know no such scale has ever been attempted; and any scale will, at present, be to a large extent a matter of personal opinion. Such a scale is, however, imperative in any attempt to give a definite solution to the problem. I shrink from the task of a definite expression on this subject, but am compelled to it or relinquish the attempt to solve the problem of educational values at this point.

In attempting to indicate a scale of relative values of the faculties, I have marked on a basis of 100, placing Moral Character at 100, and the power of taste, or the æsthetic nature, a little lower, at 90. The power of reasoning has two forms, inductive reasoning and deductive reasoning, and it is necessary to determine their relative value. Turning to history, I find that the great thinkers whom the world most delights to honor are the great deductive reasoners,—Newton, Euler, Lagrange, Laplace, Kant, Descartes, Aristotle, Plato, etc. So I mark Deductive thought 95, and Inductive thought, 90. Judgment, though intimately connected with reasoning, has a value of its own which I mark 90. Generalization, including abstraction and classification, may be placed on a par with judg-

ment, and is also marked 90. Imagination may be marked as high as 90; personally I should place it higher. Memory stands among the lowest of the faculties and is not undervalued, I think, by marking it 50. Perception I mark 70, which is perhaps rather high. Language as the means of thinking as well as the medium of expression, may be placed at 90. The power of Attention, so important to every faculty, I place at 95. Several studies give direct culture to the Will independently of the moral nature, and so I include it in the list and, realizing its great value to character, mark it 100. One or two of the studies operate on the sensibilities, but such influence is so largely included in the æsthetic and moral natures that I have not given them a separate place in the list of faculties.

I desire to have it understood that this scaling of the faculties is merely tentative and is not regarded as more than a careful attempt at an approximation of a correct result. It is at least suggestive of a correct method of solution even if it does not give results that are universally acceptable.

Nature of Studies. The next step in the solution is the classification of the studies whose values as educational agencies we are to determine. All the studies of the public school,—and I shall limit this discussion to the studies of the public school,—may be embraced under five principal classes: Language, Mathematics, Natural Science, History, and the Arts. The branches of language taught in the public school are orthography, Reading, Grammar, Literature, and in some of the higher ones, Latin. The branches of mathematics are Arithmetic, Geometry, and Algebra. The branches of natural science are Geography, Physiology, Natural Philosophy and I will add Botany. The school arts are Writing, Drawing, and Singing.

Each of these studies was developed by certain faculties of the mind, and thus when properly taught bring into activity and give culture to those faculties which produced them. The elements of the natural sciences were obtained by perception; they were developed mainly by generalization and inductive reasoning. The fundamental ideas and truths of mathematics were given by intuition, and these sciences were developed by deductive reasoning. The facts of history were originally obtained by perception, but are now taken on testimony and appeal mainly to the memory. The arts bring different faculties into activity to aid in the attainment of physical dexterity and skill in execution. Language gives activity to or accompanies the activity of different faculties, but requires the special activity of the memory in its attainment.

Scale of Studies for Culture.—Having fixed upon a scale indicating the relative value of the faculties, we must also determine a scale indicating the relative value of the studies in giving culture to the faculties. Here again is a task of great difficulty and embarrassment which I would avoid if it were possible. I shall indicate an approximate judgment by marking

on a scale of 10. The necessity for brevity will not allow me to give the reason for the number given to any study, which of course makes the task of marking less satisfactory to me. I have assumed that the study of the textbook in any branch gives some culture to the perceptive powers and have indicated the same, though it should be noticed that since this culture is nearly all in one direction it is not so valuable as the sum of the numbers would indicate. No account is taken of the influence of any study that cannot be marked as high as 4.

Orthography gives culture to several faculties of the mind which I mark as follows:—Language 6, Perception 8, Memory 9, Attention 8, Will 6. Reading, as a culture study, may be marked as follows:—Language, including words and style of expression, 9, Perception 6, Memory 6, Imagination (properly taught) 8, Attention 5, Taste 9, Morals (if the instruction is what it should be) 8. Grammar may be marked as follows: Language 7, Perception 4, Memory 6, Generalization 7, Judgment 8, Inductive Reasoning 5, Deductive Reasoning 8, Attention 8, Will 6. Literature may be marked as follows:—Language 10, Perception 4, Memory 9, Imagination 10, Judgment 5, Attention 4, Taste 10, Morals 8. Latin may be marked as follows:—Language 9, Perception 5, Memory 9, Imagination 8, Judgment 6, Deductive Reasoning 5, Attention 9, Taste 8, Morals 6, Will 8.

Arithmetic, as a culture study may be marked as follows:—Language 5, Perception 4, Memory 6, Generalization (properly taught) 7, Judgment 9, Inductive Reasoning 5, Deductive Reasoning 9, Attention 10, Will 10. Geometry may be marked thus:—Language 5, Perception 4, Memory 6, Imagination 6, Classification 7, Judgment 9, Deductive Reasoning 10, Attention 10, Will 10. Algebra is marked thus:—Perception 4, Memory 5, Generalization 7, Judgment 7, Inductive Reasoning 4, Deductive Reasoning 9, Attention 10, Will 10.

Geography, as a culture study, may be marked as follows:—Language 5, Perception 7, Memory 8, Imagination (properly taught) 6, Generalization 7, Judgment 5, Inductive Reasoning 5, Attention 6, Will 4. Physiology is marked thus:—Language 5, Perception (as it might be taught) 8, Memory 8, Generalization 6, Judgment 5, Attention 6, Morals (through care of health) 6. Natural Philosophy is marked thus:—Language 5, Perception 7 (not 4 as usually taught), Memory 6, Generalization 6, Judgment 6, Inductive Reasoning 7 (not 4 as usually taught), Deductive Reasoning 7, Attention 6, Will 6. Botany is marked thus:—Language 5, Perception 10, Memory 10, Generalization 10, Judgment 6, Attention 7, Taste 6, Will 5.

History is marked thus:—Language 7, Perception 4, Memory 10, Imagination 8 (much less as usually taught), Generalization 6, Judgment 6, Inductive Reasoning 7 (nothing as usually taught), Attention 6,

Morals 9 (not so much as usually taught), Will 6. Penmanship may be marked thus: Perception 7, Judgment 4, Attention 6, Taste 6. Drawing is marked thus:—Perception 9, Memory 5, Imagination 8, Judgment 5, Attention 8, Taste 8. Singing is marked thus:—Language 5, Perception (of sound) 7, Memory 5, Imagination 8, Attention 5, Taste 8, Morals 8. In singing, the effect of both words and music is considered.

This marking, representing the relative values of the faculties and of the studies giving culture to these faculties, is presented in the following table:

	Language.	Perception.	Memory.	Imagination.	Generalization.	Judgment.	Inductive Reasoning.	Deductive Reasoning.	Attention.	Taste.	Morals.	Will.	Relative Values.
	90	70	50	90	90	90	90	35	95	90	100	100	
Orthography, . . .	6	8	9						8			6	2910
Reading,	9	6	6	8					5	9	8		4335
Grammar,	7	4	6		7	8	5	8	8			6	5130
Literature,	10	4	9	10		5			4	10	8		5060
Latin,	9	5	9	7		6		5	9	8	6	8	6230
Arithmetic,	5	4	6		7	9	5	9	10			10	5725
Geometry,	5	4	6	6	7	9		10	10			10	5910
Algebra,		4	5		7	7	4	9	10			10	4955
Geography,	5	7	8	6	7	5	5		6			4	4380
Physiology,	5	8	8		6	5			6		6		3570
Natural Philosophy,	5	7	7		6	6	7	7	6			6	4835
Botany,	5	10	10		10	6			7	6		5	4795
History,	7	4	10	8	6	6	7		6	6	9	6	5910
Writing,		7				4			6	6			1960
Drawing,		9	5	8		5			8	8			3530
Singing,	5	7	5	8					5	8	8		3905

If we now combine the marking of each branch with the numbers denoting the value of the faculties, and take the sum of the several results, we shall have a set of numbers which will indicate the relative value of the different branches of study for discipline or culture. These numbers are given on the right of the table. They indicate the following relative values of the branches of study for culture: Orthography 2910, Reading 4335, Grammar 5130, Literature 5060, Latin 6230, Arithmetic 5725, Geometry 5910, Algebra 4955, Geography 4380, Physiology 3570, Natural Philosophy 4835, Botany 4795, History 5910, Writing 1960, Drawing 3530, Singing 3905. Attention is called to the fact that Latin, by this system of marking, stands highest on the list of culture studies, and that History and Geometry are next highest, and, without any intention of the writer, have the same numbers attached.

These numbers indicate the relative values of the studies for culture; but let it be understood that no stress is laid on the *particular numbers*

obtained. They indicate no fixed values of the studies but merely relations by which a comparison may be made. They are designed to exhibit only a near approximation to what may be regarded as a correct result. Again it is remarked that they do not indicate a final judgment of the author of this paper; further reflection and investigation may lead to a modification of the marking of both faculties and studies. The method of marking by numbers is designed not so much to reach present results as to indicate how definite results may be reached. It will enable any one to form an intelligent opinion on the question of educational values, or to test, in a scientific manner, an opinion already formed.

It hardly need be stated that the attaching of figures to this outline and thus committing myself to a definite opinion was a task full of embarrassment and one requiring considerable courage. It would have been much more agreeable, after having pointed out the method of solution, to indulge in general reflections upon the value of the different branches, leaving to others the application of the method of solution suggested; but this would have subjected me to the criticism of the engineer, who, after building his bridge on scientific principles, was afraid to cross it. Besides, it seemed that the time was ripe for something more definite and scientific than general reflections, and some one must make a beginning in the application of scientific principles, even if that beginning was attended with many imperfections. Permit me to suggest to those who object to the results, and that there will be many objections is not doubted, that in attempting to reach more accurate results the detailed marking must be examined with great care, and the most careful judgment exercised in adjusting the numbers for each faculty and each study. I may remark in passing that in order to guard against error arising from personal preference, I have marked my favorite studies a little below my judgment and some other branches a little above it.

Another element that enters into this estimate of relative values is the *methods of teaching* a branch. With a good method of teaching, any study gives more culture than with a poor one. In the above marking I have had in my mind a high average among the methods of teaching in use; often perhaps higher than those used by the majority of teachers.

II.—VALUE FOR USE.

The figures of the table represent the educational values of studies from the stand-point of discipline or culture. The next step in the solution is the determination of their value from the stand-point of knowledge, or of the use of knowledge.

This part of the solution is, if possible, more difficult than the first part. The inquiry is immediately complicated by the question, what is

to be the pupil's occupation in life? for the value of a branch of knowledge depends largely on what he is going to do with it. If he is to be an engineer, drawing and mathematics will be more useful to him than grammar and Latin; if he is to be a book-keeper, penmanship and arithmetic will be of more value than algebra or drawing. It is evident, however, that the consideration of occupation would so complicate the problem that its approximate solution, even, would be impossible. The element of special education must, therefore, not be permitted to enter into the discussion. The solution must be based on that general education that prepares a person to discharge the general duties of life, or to enter upon any of the ordinary vocations with about equal preparation.

The solution of this part of the problem,—that is the determination of educational values for use,—to be conducted in the same general manner as the first part, requires three distinct things: First, we must determine the *leading interests* of life to be benefitted by knowledge; Second, we must determine the *relative value of these interests*, indicating the same by a *scale of numbers*, as was done with the faculties; Third, we must then determine the *relative values of the different branches* of study in the attainment of the different interests or objects of life. The combination of the two sets of numbers thus obtained will give an expression of the *relative values of studies for use*.

The Interests of Life. As above stated, we must first determine the leading interests of life to be secured by the use of knowledge. This part of the problem which at first sight seems simple, increases in difficulty as we approach it. Mr. Spencer, in his discussion of "What knowledge is of most worth," divides "the leading kinds of activity which constitute human life" into five general classes:—1, Self Preservation; 2, Indirect Self Preservation; 3, Rearing Offspring; 4, Social and Political Duties; 5, Miscellaneous Activities. The studies he thinks best adapted to secure these ends are:—1, Physiology; 2, Mathematics; 3, Physics; 4, Chemistry; 5, Biology; 6, Sociology; 7, Parental Duties; 8, Duties to Citizens (History); 9, The Arts (for Aesthetic culture). In his discussion the conclusion is reached that the sciences stand first in value, without indicating, however, which of the sciences or their relative value. His own words are, "Thus to the question with which we set out — What knowledge is most worth? — the uniform reply is Science — This is the verdict on all the counts."

Whatever may be said of this celebrated essay, it does not decide the question of educational values. It confirms, however, the principle of fixing upon several of the leading activities or duties of life and estimating the value of studies by their relation to these activities or duties. If such objects could be agreed upon we could then proceed as we did with the faculties of the mind, indicating their relative values with numbers summing the results as before.

To illustrate the method, let us take Spencer's list of activities slightly modified and expressed in simple terms. These are:—1, Life; 2, Business; 3, Enjoyment; 4, Parenthood; 5, Social Duties; 6, Political Duties; 7, Moral Duties. Arranging these systematically, marking as we did the mental faculties, we shall have the following table :

	Life.	Business.	Enjoyment.	Parenthood.	Society.	Politics.	Morality.	
Orthography								
Reading								
Grammar								
Literature								
Latin								
Arithmetic								
Geometry								
Algebra								
Geography								
Physiology								
Natural Philosophy								
Botany								
History								
Writing								
Drawing								
Singing								

Scale of Values. If we now mark these activities or objects of life indicating their relative values, and also mark the studies indicating their relative values in the attainment of these several objects of life, we can then combine these two sets of values, as in the case of the faculties, and thus obtain numerical expressions indicating the *relative values of studies for use*. We shall thus have two expressions for the value of each study, one for culture, and the other for knowledge; and by uniting these two values and dividing by 2, we shall obtain a numerical expression denoting the relative value of each study for both culture and knowledge. These numbers will indicate the relative educational values of the several branches of knowledge, and the problem will be solved.

The difficulty of deciding upon the leading activities or duties of life, and of determining their relative values and the relative values of the branches of study in securing these objects is so great that I shall not venture at present to apply the numbers and complete the solution which I have suggested. I am compelled to be content for the present with indicating the correct solution of the problem, leaving this part of the solution for other investigators or for a more thorough consideration of the subject than I have yet been able to give it.

Another classification of the activities or interests of life which seems a little broader and perhaps better adapted to compare the practical values of studies is the following:—1. Life; 2, Business; 3, Science; 4, Literature; 5, Useful Arts; 6, Fine Arts; 7, Morals; 8, Politics; 9, Religion. The difficulty of determining relative values on this basis is also so great that I do not venture to indicate them without further reflection. One source of this difficulty, as will be seen by those who may make the attempt, is that the several interests in either classification are not distinctly differentiated, but more or less overlap one another.

This consideration leads me to remark that a simple practical method of reaching an approximation of the relative values of studies for use is to take some one leading object of life, as *happiness* or *moral character*, etc., and make it the basis of comparison. Such a method, if the object could be agreed upon, would remove several elements of perplexity and give a conclusion that would be approximately satisfactory. Now, the one thing for which all pupils are preparing is *citizenship*; and a very fair conclusion in respect to the values of studies for use may be reached from a consideration of the studies best suited to fit a person for citizenship. What we need, however, is a satisfactory classification of the duties or activities of life, and the solution can then be made more scientific and reliable.

Concluding Suggestions. In concluding this essay, permit me to remark that I think I have pointed out the true method of solution though I have not ventured to complete the solution myself. The problem must be solved from the stand-points of Discipline and Utility, or as otherwise stated from that of Culture and Use. The outline presented indicates what must be done in order to reach results that are even approximately correct. My figures under the head of Culture may not be entirely acceptable. I am not myself satisfied with several of them,—but I trust they may suggest a marking that may be regarded as a close approximation to the truth. Maturer reflection may also enable us to agree upon some system of marking studies under the several divisions of the utility of knowledge that may be generally acceptable.

Should it be thought that the method of indicating values by numbers is not a practical one, I reply that it is the only treatment that promises anything like definite results. There has been a great deal of indefinite statement in respect to the superiority of one study over another, reminding one of the little boy's composition on the horse, in which he wrote, "The horse is the most useful animal in the world, and so is the cow." The time has come when we demand something definite on the subject, and if the relative values will not admit of a representation in figures then they are not definite. Huxley tells us that "we shall sooner or later arrive at a mechanical equivalent of consciousness"; and if there

is even a shadow of truth in this statement it surely seems that it is possible to indicate our ideas of the relative values of studies by numerical expressions. That the problem is not yet completely solved does not preclude the hope that it will be more definitely settled at no distant day.

The suggestion of representing educational values by numbers, though the most novel and striking part of this essay, is not regarded as its most essential part, and I trust will not lead the attention from the fundamental principles of the solution. The method of solution indicated is based on several fundamental considerations which will be briefly restated. First, the educational value of studies must be determined from the two stand-points,—*Value for Culture* and *Value for Use*. From the stand-point of Culture we must determine three things: 1. The *faculties* to be cultivated; 2. The *relative value* of these faculties; 3. The *relative value of studies* to cultivate these faculties. From the stand-point of use we must also determine three things: 1. The *interests* or *objects* of life; 2. The *relative value* of these interests; 3. The *relative value of studies* in securing these interests. From these two sets of values single values can be obtained which will indicate the results of the solution.

In closing I venture the opinion that the solution of the problem from the stand-point of culture is sufficient for all practical purposes in education. Several considerations point to this conclusion. The primary object of education is discipline or culture; and if this object is attained, useful knowledge is usually acquired. A properly disciplined mind is fitted for the duties of life, and can and usually does acquire that knowledge of which it can make the best practical use. Again, the solution from the standpoint of culture is much more scientific and definite; for since knowledge is the product of the mind, we can see the relation of each science to the faculty or faculties which produced it, and thus readily estimate the value of a branch of knowledge in the discipline of any faculty. On the other hand, the circumstances of life are so variable that the estimate of the value of any branch of knowledge for the use that may be made of it must be uncertain and indefinite. I thus prefer to take just the opposite of Spencer's position, and leave the discussion where the question of discipline or culture puts it, believing that the results thus reached will indicate what studies are best for the welfare of the individual and the race.

Mr. Strong, of Michigan, desired to agree with other speakers concerning the value and interest of the elaborate report of Dr. Brooks, and yet he had some misgivings as to the correctness of the conclusions of the

paper and the possibility of a satisfactory determination of the question by the method therein pursued. In the first place he doubted if a mental stimulus was ever so local in its application as was supposed in the paper. A boy is a unit and not a bundle of unrelated powers, and whatever touches or rouses him, touches or arouses him all over,—intellect, imagination, will,—indeed the whole being. For example, he forms and learns the multiplication table, and undoubtedly is improved in power of attention and of logical and associative reasoning. But this is not all; he gains a new sense of general power; he feels that he is more of a man. He stands straighter; he reads better; his imagination is stimulated; the stars look brighter to him; in short he feels the multiplication table through every fibre of his nature.

Then the paper makes no account of the teacher, who is the main factor in the case. The faculties stimulated by geography are mainly dependent upon the teacher of geography. And so of other branches of study.

PROCEEDINGS
AND
ADDRESSES
OF THE
ART DEPARTMENT.

ART DEPARTMENT.

TOPEKA, KANSAS, July 13, 1886.

REPRESENTATIVE HALL, CAPITOL BUILDING.

The twenty-sixth annual meeting of the National Educational Association opened at three P. M., with a meeting of the Department of Art Education, Pres. Walter S. Goodnough of Columbus, Ohio, in the chair.

His able opening address was a *résumé* of the work of this department, and reviewed the advancement made in art work as introduced in the public schools, through the efforts of this organization. At the conclusion of the address, upon motion of Professor Carter of Massachusetts, Mrs. Lillian Hoxie Picken, of Kansas, was chosen temporary secretary of this department. The President was authorized to appoint a committee to nominate officers for next year, and a committee on vacancies.

Professor Charles M. Carter, agent for promotion of Art Education in Massachusetts, delivered an earnest and effective address upon "Manual Training Through Industrial Drawing."

Professor A. G. Boyden of Bridgewater, Mass., who was to open the discussion upon the paper, being absent, a general discussion was announced.

Professor Ordway of Tulane University, said: "Had Lord Bacon lived to see the exhibit in Library Hall to-day he would have amended his aphorism that it might read, 'writing *and drawing* make an exact man.'" He spoke of the increased interest with which pupils will observe things, — for example, in a visit to a mine, if they have carefully read an account of it. But for a full conception of it, writing does not go far enough, — a carefully prepared series of drawings illustrating the chambers of the mine make it so completely a possession of the mind that a visit to it is like a meeting with an old friend. He showed the power of drawing as an expression of ideas in connection with such studies as Physiology, still more in connection with construction and design. When pupils have seen they have begun, when they have written they have well begun, when they have drawn they have succeeded in obtaining clear impressions. These steps followed by planning and construction complete the processes by which the full idea is evolved. Men who cannot express

what they conceive are not the highest style of man, and every man and woman is enlarged in mental development and sphere of usefulness by learning to observe, draw, and construct. If any one would have manual training, by all means let it be in connection with drawing.

Upon request of the President, Dr. John Hancock, of Chillicothe, Ohio, gave a report of the consideration the Educational Council had given this subject. Dr. Hancock stated that however uncertain he might be as to placing a workshop in every public school he had no uncertainty whatever about drawing in every schoolroom. He was much discouraged at the chaotic exhibition of drawing at the Centennial, but the exhibits at Madison, New Orleans, and Saratoga in the last two or three years, and in Topeka to-day, were most encouraging and showed the tremendous strides that had been made in this study. There seemed a few years ago, a total lack of design in the mass of work called drawing. Now we not only imitate, but express and invent. We read drawings and work out forms of art which stimulate our pupils, add to the general enjoyment and develop imagination and the expression of the elements of beauty. He spoke at length of the value of drawing as a means of expression of thought and related facts which had come under his observation while superintendent of schools at Dayton, Ohio. We are sending out mechanics whose sphere is enlarged and whose hands are multiplied.

He wanted to see drawing in all ungraded schools, and closed with a glowing prophecy as to the future of art education in this country.

Professor Ordway added a few words, showing the direct value of this work upon the arts and commerce of the nation.

Mrs. Lillian H. Picken said that the question in this part of the world had gone beyond any discussion of utility or feasibility. It is a question of methods and aim and we have only recently begun to see our way clear.

Dr. Hancock asked which should come first — the study of the object, or the making of the drawing.

Professor Ordway explained the close relation of the two processes and how interlocked they are in any good course. The pupil should study a geometric solid — for example — then make it in clay, then make a drawing of it, then make the object from the drawing.

Miss Sprague, of Minnesota, spoke of the great facility of small children in Chicago, whom she had seen draw from description. It was thoroughly successful and greatly helped accuracy and language study.

President Goodnough announced the following committees:

ON NOMINATIONS,

Professor John M. Ordway, of New Orleans, La.

Miss Ada M. Laughlin, of St. Paul, Minn.

Miss Josephine C. Locke, of St. Louis, Mo.

ON VACANCIES,

Professor Charles M. Carter, of Boston, Mass.

Mrs. Lillian Hoxie Picken, of Emporia, Kan.

Miss Cornelia Sullivan, of Cincinnati, Ohio.

TOPEKA, KANSAS, July 15, 1886.

LIBRARY HALL.

The second session of the Art Department opened with the reading of the records of the previous meeting by the secretary.

Mrs. L. H. Picken, of Kansas, gave a lesson to represent instruction in free hand perspective as it would be given in an intermediate grade. The subject of the lesson was the foreshortening of the ellipse resulting from the foreshortened circle. Three young people from the Topeka schools were used as a class, and models of natural objects were utilized for illustrations. The following is an outline of the lesson :

SUBJECT MATTER : Perspective of circles,—ellipses.

MATERIALS FOR ILLUSTRATION : Iron rings, wooden balls, wooden cylinders, blackboard and crayon.

METHODS OF DEVELOPMENT : Drawing,—natural size, enlargement.

APPLICATION : The ellipse from perspective circles is foreshortened.

In the discussion which followed, Mr. Carter expressed gratification that Mrs. Picken had refrained from telling the pupils, but had led them to find out for themselves. He asked when such work should begin in schools.

Mrs. Picken said that such effects of foreshortening were early observed and the pupils' ideas were gradually corrected as in the study of language. The pupils are led to observe effects of foreshortening in the second year.

Miss Laughlin, of St. Paul, said, in answer to a question, that object drawing began in the fifth year.

Miss Locke, of St. Louis, said the same line of work had been taught in some schools with success in the latter part of the fourth school year.

President Goodnough thought it well to bring out classroom methods in regard to the use of models, grouping, arrangement, etc.

Miss Locke said cylindrical form presented the same appearance to all parts of a room, and hence it is easiest to begin with such.

Begin by use of a wire cylinder. Large model that all may see it. Held first vertically. All who can work at the blackboard should do so—the teacher drawing out the ideas of the child, no copy at all before the pupil save the object.

President Goodnough asked Professor Carter whether he had pupils draw groups chiefly from objects or from descriptions.

Professor Carter used both methods. Each had valuable features of its own.

Miss Laughlin said another way was for each pupil to have on his desk the paper model which he had made and prove by his use of it that what he had been taught or had seen as true in the large model was true of his also.

The report of the committee on "Drawing as Related to Other Studies and How Its Use in that Direction can Best Be Promoted," was then read by the Secretary.

This report included a resolution that the inquiry be continued, and that the use of color be included; and also the use of color and making in normal schools. The resolution was adopted and the committee continued. In the discussion, Miss Locke said, drawing was not all of a child's education, but only one of many means to a common end. In order to know what to expect from a child between seven and fourteen years, we must consider what they accomplish in other studies.

We must require no more in form than in language and number. Each of these subjects is at the same time a principal and a subordinate. As a principal it is made a specialty and drilled for. As a subordinate it is used as an auxiliary to other ends. So with drawing.

The department proceeded to the election of officers for the ensuing year.

The nominating committee presented the following report:

For President, Walter S. Perry, Worcester, Mass.

For Vice-President, Mrs. E. F. Dimock, Chicago, Ill.

For Secretary, Mrs. Lillian Hoxie Picken, Emporia, Kansas.

On motion, the President was empowered to cast one ballot for the officers and they were declared elected.

Miss Locke offered a resolution that the President appoint a committee to correspond with the principals of high and normal schools, also with superintendents of city schools, in regard to securing improved conditions for instruction in drawing in high and normal schools.

Consideration of the resolution was postponed until it was placed in writing.

TOPEKA, KANSAS, July 16, 1886.

MUSIC HALL.

The third meeting of the Art Department was held in Music Hall, to avoid the interruptions incident to the Art Exhibition in Library Hall, and it proved one of the most enjoyable of the series.

Miss Ada Laughlin, of St. Paul, Minn., gave a lesson in design, as she would teach in early grades of school. She drew rapidly upon the black-board, illustrating every stage of the work, giving a clear and admirable exposition of the method. The question was asked, "How long would you let pupils study the natural before taking up the conventional floral forms." The answer was, "only one day."

Mr. Watt asked if the use of construction lines trained the pupils' faculties as well as purely free-hand work without construction lines.

Miss Laughlin replied that construction lines were but frame work.

Miss Laughlin explained that the lesson she had given was a mere beginning. A little later, pupils drew directly from leaves and natural forms; at first, symmetrical leaves were taken, and then as varied forms as nature furnished.

Miss Josephine C. Locke, of St. Louis, gave a lesson on "Constructive Drawing." She formed the audience into a class, and using geometric solids developed her lesson, which was remarkably clear and concise and drew forth rounds of applause.

In the discussion she stated that the St. Louis children drew from the outset entirely free-hand; no instruments were permitted until the seventh grade. "They may sometime be used in the sixth grade but their use can be learned at any time."

"As the sphere presents but one circular outline from every point of view why use two circles as a working drawing of a sphere?" was asked.

Miss Locke replied by holding before the audience a sphere and the end view of a cylinder. The answer was apparent. A single circle might present only a flat surface.

The resolution offered by Miss Locke at the last meeting, regarding better facilities for study of Drawing in High and Normal schools, was considered and passed, and the committee appointed as follows: Miss Josephine Locke, Mr. Charles M. Carter, Mrs. L. H. Picken, Professor J. Ordway, Superintendent John Hancock.

Professor Ordway offered the following resolution:

Resolved, That the extremely valuable report on Art, by Colonel J. Edwards Clarke, A. M., is worthy of a wide circulation, and that the Art Department of the N. E. A. respectfully requests the U. S. Senate to authorize the publication of extra copies for distribution by the Bureau of Education.

The resolution was carried.

On motion of Professor Ordway, the Department gave a vote of thanks to Professor Goodnough for his efficient services at this convention and in connection with the exhibit.

The Department then adjourned.

LILLIAN HOXIE PICKEN,
Secretary.

ADDRESS OF W. S. GOODNOUGH.

PRESIDENT OF ART DEPARTMENT, N. E. A., JULY, 1886.

Ladies and Gentlemen:

It gives me great pleasure to welcome all the old, and the many new faces I see, to this the fourth session of the Art Department; perhaps, more properly speaking, the third session, as the first meeting was simply one for organization,—the officers being elected for the ensuing year.

Our meetings have increased in attendance and importance from the first, and I hope the time is not far distant when every art teacher will feel that he cannot afford to miss these annual gatherings, no matter in what part of the country they may be held.

The Art Department of the National Educational Association does, and should, represent the most advanced thought on the subject. It affords a means by which this thought may be ripened, gathered, and disseminated throughout the country. Great strides forward have been made in methods and schemes since our organization; strides that would not have been made, if each had been, in his own little way, trying to work out his beliefs independently of all the rest of the world.

We need to get together each summer and rub off any moss that has accumulated during the year, compare notes, and draw on each other for new inspiration and developments. Many of us have been teaching what is called industrial drawing, for years; yet it is only since the organization of this department that one of the vital features of *any* course in industrial drawing has become general. I refer to construction drawing and more particularly to working and detail drawings.

It is just *ten* years ago that we commenced work in this subject, projection drawing it was then called, in the Columbus High School. The next year a simple course was mapped out for our grammar grades. Our course included front and top views of geometric solids, single and in groups, simple, common objects, and furniture, drawn to scale from actual objects. When I showed this course in a large eastern city, they declared that there would be great difficulty in getting the teachers to understand and teach it. At the first meeting of the Art Department it was shown that this subject was one of the easiest to teach; and it is *now* very generally given its due proportion of time, being commenced in the primary grades and carried through the high school.

As a result of this work, from a desire to make our teaching objective,

of as practical a nature as possible, and from the very general agitation of the subject of manual training, we have another new development which is now, I believe, just three years old, about ready to go alone. I refer to the "made" work exhibited on the tables and done in connection with the work in drawing. I will not say much on this subject for fear of occupying ground that may be covered in one of the papers.

The pupil has been making working drawings of things. What more natural and practical than for him to be led to make the objects from his drawings? What simpler and easier method could be proposed for giving a thorough knowledge of working drawings, their value and use, as well as for creating a love for mechanical pursuits? And what better means of introducing manual education into the schools in an elementary form and without expense? It surely will prepare the way for the manual training class or school which is certain to come.

Industrial drawing was advocated long ago for its value to all industries. What more fitting than that the teacher of industrial drawing should now, in connection with the drawing, take the first steps in industrial or manual training? If the lowest primary pupil is led to shape objects of clay, to form them with sticks, to cut them from paper, and later to form them of wood, metal, or other material, what is to prevent the pupil from acquiring a love for mechanical pursuits and demanding in earnest the manual training school, fully equipped for the various lines of work? This new feature of our work in drawing will popularize it immensely, and is of greatest value educationally.

Another thing showing the value and influence of this department occurs to me. In looking over some former reports of the Ohio State School Commissioner, I find that six years ago in a contribution, I contended that "any course in drawing, sufficiently broad to be termed industrial, should provide for three lines of work: construction of objects, representation of objects, and decoration of objects." Now we find these quite generally accepted terms and the course of study provides for an equal and symmetrical development of each. Formerly the pupil in the lowest primary grade commenced his drawing with the line. Now he is given clay, solids, sticks, and surfaces, which he handles, shapes, or arranges.

As soon as a new idea of value presents itself, through such meetings as this, and through our exhibitions, it becomes known and is spread broadcast, gathering strength and force as it goes, like the mountain stream, as it flows on, gradually expanding into the swift and mighty river. May this department of the National Association grow in like manner. There are many important problems seeking solution, upon which some among us, with our varied and constantly enlarging experience, may be able to throw some light.

The questions have sometimes been put to me, "What can we do in drawing in the ungraded country school, and is it of any use to attempt it? What books can we use?"

Most of you, perhaps, realize the situation: thirty or forty scholars in one room, ranging from six to sixteen years of age, nearly as many classes as there are pupils, studying everything from the work of the lowest primary grade to that of the high school, and a new teacher nearly every six months. The county superintendents in some states, in arranging courses for their schools, include drawing and are anxious to have it taught. The question is, What of all the varied work the city child gets in its carefully graded and logically arranged twelve years course, should be selected for this case? Were the teacher a fixture for more than a term or two, the question would be of easier solution; or were there properly condensed books and manuals for such cases, it would be different. A teacher of wide knowledge of drawing is certainly necessary in such a position, to properly select, condense and adapt to the case in hand, but in nearly every instance it is some one with no knowledge of the subject whatever.

It seems to me that the first requisite is a good handbook, a manual giving the teacher the needed instruction in the three principal lines of work, construction, representation, and decoration, or perhaps better, a manual of each. This should be arranged, not with reference especially to each exercise occurring in a drawing book, but to give the teacher quite full knowledge on the subject with hints on teaching it in various grades. Such a manual would be equally valuable for the normal school student, for those wishing to prepare themselves for examinations in any one of the above subjects, or for the regular teacher of the graded school. There might perhaps be a set of three or four drawing books graded and condensed for such schools.

The next step would be to provide as far as possible for the instruction of such teachers, by means of institutes or normal schools. It seems to me that this is a proper subject to refer to a committee to investigate and report at a future meeting.

In many states, particularly in the West, county or township institutes are held, more especially during the summer months. In some states it is required that every county hold at least one each year. They vary from one to six weeks in length, those of one or two weeks being most numerous. They are more in the nature of normal schools than conventions, regular lecturers or instructors being employed, and it is frequently the case that drawing is one of the subjects. The teachers in attendance may be from graded or ungraded schools, and a large number may know nothing whatever of drawing, yet they and the managers are anxious that sufficiently practical work be presented, so that they can go away and do

something with it in their schools. I have worked in numbers of these institutes, where there were, perhaps, two lessons a day of an hour each, for five days. These institutes present, in many states, the only means of instructing the teachers of country or village schools.

The question arises then, "What are we to do in ten hours' time, with one hundred to three hundred people, who are from all grades of schools, who have perhaps no knowledge whatever of drawing, but are very anxious to carry away enough practical knowledge to be able to apply it in their schools.

It seems to me that about all that can be done is to present the subject in the shape of lectures, fully illustrated with pupils' work, or similar work on a large scale, and passing paper and pencil, have the teachers get as much hand practice as possible. One cannot be told how to play the piano; he has got to do it himself. So must one get the pencil into his own hand or he will never have the confidence to stand up before a class to teach drawing. During the session of the institute they should draw all there is time for on paper, and if possible, on the blackboard. The instructor should be careful not to attempt too much, nor to talk too much. Anything the class is able to *do* will be remembered. That which they are only *told* about they *may* forget. I would divide my time something as follows, in an

INSTITUTE COURSE OF FIVE DAYS, TWO LECTURES A DAY OF ONE HOUR EACH.

1. Preliminary remarks on character and value of the study — elementary ideas of form developed by handling objects and forming them of clay; use, preparation and care of clay.
2. Handling of pencil. Practice various positions for drawing different kinds of lines, straight and curved; sketching and brightening.
3. Methods of giving lessons,—from objects, blackboard, copy, dictation, designing, arranging sticks and tablets, cutting, analysis of form.
4. Construction,—top, front and end views, sections, dimensions, geometrical solids used. Freehand.
5. Construction,—working drawings to scale; geometric or common objects used. Rule and compass.
6. Representation,—measuring in space. Drawing objects of two dimensions. Elementary principles. The circle, cylinder, cone.
7. Representation,—principles governing straight lined objects. Cube, rectangular prism, triangular prism, pyramid.
8. Decoration,—elementary ideas and principles. Simple variations. Abstract lines and forms used.
9. Decoration,—conventionalism. Natural foliage as material. Modes of arrangement.
10. *Résumé*,—outline the work of each grade for country, village, and city schools. Character of results; care of material.

These lectures, or lessons, should be very fully illustrated with objects and examples, to give as comprehensive an idea as possible in the limited time at command. In an institute of more than five days, the ground covered should be much the same, though it could be more thoroughly done and more time for practice obtained, which is greatly to be desired.

There should be carefully prepared manuals in each division of the subject, to which to refer students for more complete information and further study. If the same lecturer or instructor could meet the same set of teachers in an annual institute, for two or three consecutive years, much might be done for the country and village schools.

In conclusion, I desire to express my thanks for the honor conferred on me, and to ask your indulgence in the discharge of the duties of President of the department.

*REPORT OF COMMITTEE ON THE RELATION OF DRAW-
ING TO OTHER STUDIES AND HOW ITS USE AS A
MEANS OF ILLUSTRATION IN THIS DIRECTION
CAN BEST BE PROMOTED.*

At the meeting of the Art Department of the National Educational Association, held at Saratoga, July, 1885, a committee was appointed to consider the relation of drawing to other studies in the school curriculum, and how its use as a means of illustration in this direction may best be promoted.

The committee respectfully submit the following report.

In the first conference concerning the plan of preparatory work for this report, it was decided by the committee to include "making" in the inquiries, believing that as both drawing and making concern the study of form, any information concerning making would be valuable.

The purpose of the committee has not been, however, to consider drawing and "making" as simply drawing and making, but to consider them as means of developing ideas connected with other studies.

The committee desire to say at the outset that this report must be ranked no higher than a preliminary to an examination of the subjects presented; in fact, at this time, any report which could be made, could not be much more than a statement of beginnings and experiments.

The first work of the Committee was to gather all possible information concerning the actual use of drawing and "making" in connection with other studies.

This has been done

1. By circular letters of inquiry.*
2. By personal observation and investigation.
3. By gathering for exhibition a number of productions of actual school work showing the use of drawing and making in connection with other studies as regular class exercises.
4. By collecting published exercises bearing on the subject of inquiry.†

CIRCULARS OF INQUIRY.

The circulars of inquiry were sent out to principals of normal schools, to superintendents of schools, and to a few special institutions. Owing

* See Appendix A.

† See Appendix B.

to the illness of the chairman of the committee, these circulars were not sent out until nearly the close of the school.

The lack of a general response to the circulars should be attributed doubtless to the time of their issue, a time when so many demands are made upon all school officers and teachers.

Fifty-five replies were received ; 19 from normal schools, 33 from superintendents, and 3 from special institutions known to be developing this work.

All the normal schools reporting, use drawing in connection with other studies to a greater or less degree.

Twenty-five superintendents report drawing in connection with other studies. Nine superintendents report drawing either as not in their course of study, or as not used in connection with other studies.

Sixteen normal schools report "making" in connection with other studies ; two of these, however, report making only in connection with drawing.

Fourteen superintendents report "making" in connection with other studies ; five of these, however, report "making" only in connection with drawing.

Drawing is used by those who report, in 27 different subjects, as follows, the various names given being those found in the reports :—

Art.

Elocution.

Geography.

History.

Language.	{	Alphabet. Composition. Reading. Spelling.
Mathematics.	{	Number. Algebra. Elementary Geometry. Trigonometry and Surveying. Descriptive Geometry.
Natural History.	{	Astronomy. Botany. Physiology. Zoology.
Natural Science.	{	Natural Philosophy. Physics.
Methods for Teaching.		

"Making" is used by those who report, in 23 different subjects as follows :—

Art.	{	Form. Drawing.
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Geography.

Language.—Reading.

Mathematics. {
 { Number.
 { Arithmetic.
 { Mensuration.
 { Geometry.
 { Descriptive Geometry.

Natural History. {
 { Astronomy.
 { Botany.
 { Crystallography.
 { Physiology.

Natural Science. {
 { Natural Philosophy.
 { Physics.
 { Chemistry.

Carpentry.

Casting and Modelling.

Needlework.

The list of subjects in which “making” is used, is, if anything, more comprehensive than that in which drawing is used, except as regards those falling under the head of Language.

The replies as a general thing were brief and of such a nature that they are embodied in substance in the list of subjects.*

The lists given of objects made were in some cases quite comprehensive. One teacher says, “All materials have been used and the facts will justify me in saying that the variety of objects constructed, if enumerated, would include almost everything in the heavens above, the earth beneath, and the waters under the earth.”

The detailed list of objects made will be found in an appendix.†

Some answers to questions concerning the use of drawing are of special interest. Mr. W. J. Corthell, principal of the State Normal School, Gorham, Maine, says, “We use drawings to illustrate *all* natural science, *all* natural history, history, geography, and *all* other subjects to which it is applicable, yet we do not use it one half as much as we should.”

Mr. J. C. Corbin, principal of the Branch Normal School, Pine Bluff, says, “To illustrate many points, to train the eye, to train the muscles, to teach the art of taking pains, to impress forms of letters, countries, apparatus, etc.”

Mr. Thomas J. Gray, principal of the State Normal School, St. Cloud Minnesota, says, “We use drawing as a *means of expression of thought*, hence it accompanies all branches of study.” An enclosed slip quotes the following from the *Annuaire de l'Enseignement Elementaire* for the year 1886, published in Paris by the French Minister of Public Instruction.

* See Appendix C.

† See Appendix D.

The reference is to the educational exhibit at the World's Exposition in New Orleans. He says, "I wish specially to mention the showing made by the three normal schools (of Minnesota), and above all that of St. Cloud, which had its entire system of pedagogy set forth in very interesting tables. All the pupils of this school execute physiological and historical diagrams on a large scale, which they take out with them to assist in their own work in teaching. The same plan is pursued in geography and arithmetic."

Mr. H. S. Jones, superintendent of schools of Erie, Pennsylvania, says, "Drawing as an instrument in education is used in all the grades,—that is, as a means of imparting and receiving ideas. . . . Every one is helped by drawing in a broad sense, it is a pleasing and valuable language and is slowly but surely winning a place in all good school work."

Miss Anna Baldwin, in charge of the night school connected with Hampton Normal and Agricultural Institute, Hampton, Virginia, says, "The scholars who work in the industrial department attend school two hours in the evening, and most of the drawing done in the school is in connection with the various trades as represented in the evening school. We have had this year one class of boys who have done very good work in mechanical drawing, using instruments. Most of these were in the carpenter and blacksmith shops. The aim is to have them make the objects drawn and have them adapted to the trades."

Mr. Charles M. Carter, supervisor of drawing at Quincy, Massachusetts, says, "Since I have had charge of drawing in that city, I have taken every convenient opportunity to show teachers the importance of using drawing, both as a means of obtaining and expressing ideas, connected with any subject. To this end two years ago, a circular giving directions in regard to an approaching exhibition particularly requested teachers of all grades to make a part of their exhibits illustrate the manner in which drawing had assisted them in connection with other studies. The result was a number of drawings referring to all studies which had in any way to do with form. The primary schools make considerable use of drawing in the way indicated."

"The superintendent and teachers are alike agreed that the use of drawing in connection with school studies is of great importance, and we should gladly welcome any suggestions which may result from your committee's investigation and report to the National Educational Association."

Mr. Thomas M. Balliet, superintendent of schools at Reading, Pennsylvania, says, "I greatly regret that we cannot be of any help whatever to you at present in the matter. You are going to do a valuable service and I trust we, at Reading, shall not be the last to profit by it."

Mr. James MacAlister, superintendent of schools at Philadelphia, says, "I am exceedingly glad that this matter is to receive attention at the

meeting of the National Educational Association, and I trust an effort will be made to call the attention of teachers to its importance. The use of drawing for the purpose of illustrating other branches of instruction would, I think, do much to promote improved methods in every grade of school work. We intend to do what we can here to further the objects for which your committee has been organized."

Mr. Walter S. Perry, supervisor of drawing in Worcester, Massachusetts, says, "Drawing as an aid in teaching other subjects, although much used, is not as systematically employed as it is hoped it will be when teachers can be brought to see its full value."

PERSONAL OBSERVATION AND INVESTIGATION.

Personal investigation in various directions has shown that the educational value of drawing and "making" is being heartily recognized, and that in many cases these means of development are being adopted.

Doubtless the foremost leader in this work both in drawing and "making," in primary education — a work essentially of the new education — is Col. Francis W. Parker, of Cook County Normal School, Illinois. The committee regret exceedingly not to have heard from him just at this time. The influence of his work in Quincy, some years since, in this direction is seen there now, and this work as well as that done by him later at Normal Park has inspired a great deal of that which is now reported from so many other places.

At the same time that Col. Parker was developing this work in primary education, other thoughtful minds had recognized the use of drawing as a feature in education. A tabular statement of the use of drawing in natural history was given by Dr. Alexander Winchell to the students of Syracuse University about ten years ago.*

It bears so directly on this line of inquiry that the committee have thought it desirable to have it reproduced for this report. It will be found in full in connection with the exhibit made by the committee.

In higher education the college of the city of New York is prominent now in the use of drawing and "making" in school work.

Gen. Alexander G. Webb, the president of the college, has the strongest belief in these agencies in mental development.

"Making" was introduced this last year into the Art Students' League of New York by Prof. Thos. Eakins of Philadelphia. To make his ideas clear he used a skeleton, suspended from a frame, and a pot of clay. Taking clay, he formed a muscle and fastened it on the skeleton; then pointing out a cast, he asked the living model to bring it into action. The muscles of the shoulder, abdomen, and arms were thus taken up.

* See Appendix E.

It is interesting to know how "making" is used in the education of the blind.

"The most interesting feature of the commencement exercises of the Perkins Institution for the blind, held in Tremont Temple, June 2, 1885, was the practical illustration given by the younger pupils of Froebel's methods of instruction, modelling in clay and embroidering, at separate tables, with deft facility and sometimes with quite amusing originality.

"As soon as the children began to work thus, the Rev. Edward A. Horton made a pathetic cogent quickening and altogether admirable appeal in behalf of the poor little blind waifs, and of the kindergarten enterprise, presenting its demands in a manner that was inspirational."

While this appeal was being presented it was supplemented and enforced by some twelve young pupils, six boys and as many girls, who illustrated in the presence of the audience some of the fruits of their own kindergarten training. From the class in physiology one made the model of a heart, another the human spinal column. A boy from the class in zoology moulded the form of a large turtle with its articulations; another, polyps at work on a coral reef. Pupils from the botany class made the stem, root and leaf of a plant, describing the changes which the leaf undergoes. Little fellows, who had studied geography, modelled in clay from memory very good representations of the valley of the Nile, and North America, with its capes and crannies; and a very little girl exhibited a book as her work and named it "Heidi," in honor of her favorite story book. Thus they gave very effective illustrations of their object lessons, demonstrating better than any formal address the possibility and propriety of such a preliminary school as the necessities of the young blind demand.

In Johns Hopkins University, Baltimore, "The forms of organs of the body and even microscopic tissues greatly enlarged, as the ultimate structure of the retina and cortis organs, or mathematical surfaces, or figures illustrating the so-called three dimensions of color, or horopter surfaces, are made in clay by advanced special university students, with advantage. The educational value of this is high, and it has been highly commended and urged by many eminent biologists."

The students of Pedagogics, under Dr. G. Stanley Hall, have made a great deal of illustrative apparatus in wood, paper, twine and thread, clay, metal, etc. Dr. Hall will at some future time make a report in detail of the work of this kind done at the University.

THE EXHIBIT.

The collection of school papers made by the committee to illustrate their subjects of inquiry shows Primary, Grammar, Normal, and Collegiate

work in the subjects of Number, Language, Physical and Political Geography, Physiology, Mensuration, Botany, Zoology, Mechanics, and Physics, and Descriptive Geometry.

The exhibition shows more of drawing than of "making." "Making" as connected especially with the study of form and drawing is abundantly shown in the *main* exhibit of the department.

A small exhibit of clay must however be specially noted. It is from the Perkins Institution for the Blind in Boston, and shows how wonderfully ideas of form can be obtained through touch alone. Among the objects moulded are an oyster shell and an oyster, the human heart, and a vertebra of the spinal column.

The exhibit of drawings in the Primary and Grammar grades in Number, Language, and Geography, is from Syracuse, New York. Concerning it, Superintendent Smith says, "All of this work is class work, and the most of it includes all the class. The class work of Putnam junior and senior grades was done in from 15 to 20 minutes time and with no expectation on the part of the pupils that it was ever to be put on exhibition. The principal value of this kind of work, to my mind, lies in the fact that it reveals more perfectly than language is likely to, the *conceptions children have of the facts they are trying to learn*. Some of these illustrations are very poor; but they reveal to the teacher just what the child needs.

"The folio of maps from Prescott school, and *all* this work is just as it was used in the class work without any alteration or connection."

Mr. Wilson, the principal of Putnam School, Syracuse, says, "The following is a brief outline of the way the work in physical geography was prepared:—The pupils have a textbook. They take up the subject by topics. I talk with them and question them about the topic under discussion, usually using the blackboard while presenting the lesson. After a subject has been studied in that way, for a day or two, the pupils are asked to reproduce in writing what they know about it, and to illustrate by a picture if they can. They are not required or even asked to use color, but nearly all use it. The color used is simply colored blackboard crayon. I have it lying around where the scholars can get it if they wish to use it. Very few directions are given, my object being to discover what is in the mind of the child. I find that errors are revealed by the picture that do not appear in the words. For example a child will *define* plateau correctly and *make* it like the stump of a tree. The time spent by pupils on the papers sent us was from 15 to 25 minutes."

Special attention is called to the large folio of maps from Prescott School, Syracuse. It begins with a drawing, showing the points of compass; then follow successively in pencil and in color, a plan of the school room, a plan of the schoolhouse, a plan of the block of land on which the schoolhouse stands, the ward in which it is, the city of Syracuse, the

county of Onondaga, the state of New York, the United States, North America, South America, Europe, Asia, Africa.

Concerning the exhibit of the developments of solids, Mr. W. S. Perry, Supervisor of drawing in Worcester, Massachusetts, says, "Pupils cut patterns out of paper and make cylinders, prisms, cones, pyramids, etc. These models are made much use of in connection with the study of mensuration." (A few examples accompany this note.)

Concerning the exhibit in Physical Geography, Mensuration, Physiology, Natural Philosophy, made by the Branch Normal College, Pine Bluff, Arkansas, Mr. Corbin, the Principal, says, "I would like to have it remembered that my students are colored people, who have had very limited advantages."

Concerning the exhibit from the State Normal School at Framingham, Massachusetts, in Botany and Zoology, Miss Ellen Hyde, the Principal, says: "Our drawing is all done from the objects themselves, and is done in the classroom, usually on blackboard, or in the pupil's own note-book. These were done in the same way, only on cards for your benefit. The drawing, as you will readily see, is not intended to be artistic but simply illustrative. The work is done with children for the purpose of training to careful observation, and accurate description. We require it of the Normal School pupils for the same purpose, and in addition for the purpose of teaching them how to teach these subjects in their own schools."

The work in Mechanics and Physics, and Descriptive Geometry, from the college of the city of New York, fittingly completes the exhibit. The papers in Physics should be carefully examined, noting the requirement at the top of the paper. Gen. Alexander S. Webb, the President of the College, says: "The papers in Physics are the result of work in the laboratory, from the lectures and from the instruments. They represent, taken as I took them, the actual work in that subject on the part of the several students whose names are upon the papers. Each paper is one *recitation* of student, or record of his study of the instrument just before him, *after* hearing a *lecture* on the subject. The student is made to draw from the instrument. All you will receive is to illustrate first, instruction by lecture; next, application of this knowledge. Without a knowledge of drawing no one could succeed with us."

Miss Josephine Locke, Supervisor of Drawing in St. Louis, sends to the exhibit, work in "making" as follows, "Each and all of the models illustrating the 'American Text Books of Art Education,' Nos. 1 to 9 inclusive; designs in clay and reproduction of casts in clay."

HOW TO PROMOTE THE USE OF DRAWING AND "MAKING."

The Committee find very little in the replies suggestive of any definite plan for promoting the use of these agencies, or for securing better results in the work.

Mr. Charles M. Carter in his reply concerning the schools in Quincy, says: "I need not point out that rules for making trees, clouds, bushes, etc., without underlying knowledge, are not in accordance with educational principles. While it may be unavoidable that pupils should make illustrative sketches which embody some principles not understood, at the same time, the teacher should insist upon the illustrations embodying all truths which have been brought out in the regular study of drawing.

"To secure freedom of drawing, it will undoubtedly be necessary for the teachers to have *knowledge* and *practice* in principles — then they will have *confidence* and make more practical use of drawing."

There are but one or two who suggest any connection between the regular work in drawing and the free use of it in other studies.

In Waltham High School, class four take drawing lessons from apparatus used in Physics. These help in regular lessons in making clean notes.

Gen. Webb says, "I will gladly prepare for you in the fall, a full exposition of our work in that Department (drawing), and in our application of its results."

CONCLUSIONS.

From a general survey of the work as far as known, the Committee report that many advanced educational thinkers actually in school work, not only recognize the value of drawing and "making" as educational means to be used in nearly all the studies of public schools, but they also carry this recognition into practical work to a greater or less degree, although their uses of drawing seem to be as yet unsystematic, and generally indicate a lack of knowledge of the underlying principles of drawing or representation.

There are also a great number of school officers and teachers who accept drawing as a proper and desirable study, to be pursued regularly, in the public schools; but at the same time, they seem to regard drawing as a special study, as something to be studied by itself, and entirely overlook its great value as a means of developing other studies.

A great many of the replies received indicate that only the technical side of drawing is appreciated. Many do not report drawing as used even in Geography and Geometry. The committee hardly think it possible that instruction is given in these studies without some use of drawing. It would seem rather that those reporting were so accustomed to look at drawing as a special or technical study that they failed to realize that it had been used in other studies. *They need a BROADER view.*

The time seems to have come when an advance step should be taken not only in regard to the teaching of drawing, but also in regard to the uses of drawing in other studies. The results of instruction in technical

drawing shown by such leading cities as St. Louis, Chicago, Worcester, Syracuse, Newark, St. Paul, etc., show that in these cities at least, the teachers are prepared to make the advance and boldly apply drawing, in the teaching of other studies; and there is reason to hope that the developments of the next few years will show as conspicuous results in the uses of drawing as applied to other studies, as are now shown in the study of drawing itself.

MRS. MARY D. HICKS, }
WALTER S. PERRY, } Committee.
ANSON R. CROSS, }

The exhibit shows that color as well as drawing and making can be made a very effective means of teaching, and that many teachers have already availed themselves of it, but in a very imperfect way.

In view of the importance of the subjects and of the interest already manifested, the committee feel that this inquiry should be continued, and that its scope should be enlarged, so as to include an inquiry into the study and uses of color in various studies as pursued in the schools, and also in regard to the instruction given to pupils in "making." This inquiry should also embrace the nature of the instruction in these subjects, which is given in normal schools.

The committee, therefore, in submitting this report, beg to add for the consideration of the department, the following resolution:

Resolved, That the inquiry as to the uses of drawing and "making" in connection with other studies be continued for another year; that its scope be enlarged to include the use of color; and that special inquiry be made in regard to the training of teachers in normal schools in the uses of drawing, "making," and color, as a part of their preparation for teaching in public schools.

MARY D. HICKS,
WALTER S. PERRY.

MANUAL TRAINING THROUGH INDUSTRIAL DRAWING.

BY CHARLES M. CARTER, AGENT OF THE MASS. BOARD OF EDUCATION
FOR THE PROMOTION OF INDUSTRIAL DRAWING.

Ladies and Gentlemen :

This is an age of remarkable interest in all educational matters. It is an age of thought directed by the grand principles of Comenius, Froebel, Pestalozzi, Bacon, Rousseau, and others. Truths they uttered years ago are the underlying principles of the remarkable revival termed the "New Education." The great strides which have been made in all branches of education are in response to a growing belief in a few educational truths. Learning to do by doing—making pupils actively use their own powers, and arranging orders of development in harmony with nature, are among the essentials of educational reform.

How to educate the "whole man" is the problem engaging the attention of earnest educators.

It is our purpose to direct your attention as specialists, to the position which you occupy in this reform.

All educators recognize the fact that any system of general education must refer to things. For every moment of our existence brings us in contact with them, either passively or actively. We all use things every day of our lives. Many of us are engaged indirectly or directly in their production, and all derive more or less pleasure from them according to the degree of their use or beauty. We cannot, if we would, escape having something to do with things. They are continually with us, and, inasmuch as common school education must have to do with matters common to all, the proper manner in which to study things becomes an important consideration.

All of the present school studies have something to do directly or indirectly with things, but while this is true, no one of them supplies us with a general method applicable in the study of all. No one of them gives training and knowledge which will have a direct bearing on success in various professions and occupations.

Regarding objects about us we are struck by the fact that they all represent thought put into concrete form. Take a table for instance. Its level top shows thought of convenience. Its height shows consideration for the person who is to sit at it. The features of its construction repre-

sent thought of the capabilities of the materials, and skill in the use of tools. The gracefulness of its form convey to us thoughts of beauty. The object in every respect is an embodiment of thoughts which appeal to our regard for use and beauty.

And so it is with every object, natural or artificial, they are embodiments of thought either of God or man. This is a fundamental truth. It is hardly necessary, then, to state that in studying things the most important consideration is to master the thought which they represent; but this alone is not considered. Experience shows that progress in all departments of human activity rests on the ability to exercise independent, original thought; otherwise we would not have to-day the printing-press, the steam engine, and the remarkable developments in applying electricity.

Accepting the opinions of prominent educators we know that training and knowledge are two important outgrowths of all education. We are led to inquire—How may things generally be studied to secure training and knowledge through the thought they represent?

Let us briefly consider the method by which this should be done. Spencer says: "In education the process of self-development should be encouraged to the fullest extent. Children should be led to make their own investigations, and to draw their own inferences. They should be *told* as little as possible, and induced to *discover* as much as possible." So that, as he further says, "In manhood too, when there are no longer teachers at hand, the observations and inferences required for daily guidance, must be made unhelped; and success in life depends on the accuracy and completeness with which they are made." While most common school studies refer to things, they do not give us what we wish, something is lacking.

We want a study which will make pupils think—a study which will give that elementary training which will widen fields of usefulness—which will lead to the discovery of beauty in nature and art.

All of these educational advantages have been found connected with observing and expressing ideas relating to the Form of Things, and mainly for these ends manual training and industrial drawing have attracted the most marked attention.

The two subjects have generally been spoken of as distinct and apart. We hope to show however that they have much in common. Both are emphatic representations of the study of things.

Considering the manual training schools first, we find that mental and moral development are placed first in importance. Great stress is also laid on the accompanying training of hand and eye.

These ends are attained by leading the pupils to consider principally things relating to the arts of construction, as exemplified in the machine shop, the carpenter's shop, the blacksmith shop, etc. Exercises are given

in constructing the elementary forms of these trades,—employing what have been termed “universal tools,” such as “the axe, the saw, the plane, the hammer, the square, the chisel, and the file.” It is of course understood that the complete curriculum embraces other studies. We find furthermore that a large amount of time is devoted to drawing; the Chicago Manual Training School devoting one hour to drawing for each two hours of shop work.

The value attached to drawing by those interested in these schools is voiced by Mr. Ham in his work on Manual Training, where he says: “The value of drawing as an educational agency is simply incalculable. It is the first step in manual training. It brings the eye and the mind into relations of the closest intimacy, and makes the hand the organ of both. It trains and develops the sense of form and proportion, renders the eye accurate in observation, and the hand cunning in execution.” To which we may add that the French Imperial Commission of 1863 said, “that drawing, with all its applications to the different industrial arts, should be considered as the principal means to be employed in technical education.” From which we may infer that it is equally important in elementary training.

Existing manual training schools are really an outgrowth of the industrial schools of Europe; which generally aim to prepare pupils for particular trades. The manual training schools of this country have a broader aim. They desire to give a general development of the pupil, valuable in every occupation. It should be noted however that our manual training schools still show the influence of their origin in being devoted almost entirely to one class of industry, viz., mechanical pursuits, as the means of general development. The query suggests itself, Is not this a too limited basis for schools aiming to give general culture of mind, hand, and eye? Is the study of things wisely limited to the mechanic arts? If it is our aim to prepare pupils for mechanical pursuits, the course of instruction seems admirable, but if judged as a means of general culture it is certainly open to criticism. The world of things is far broader than laboratories devoted to carpentry, wood-turning, foundry work, forging and machine tools. The field of things is not limited even to manufactured products. We have all nature inviting us to study a great variety of subjects of the greatest interest. Some of these studies are already pursued, such as botany, mineralogy, physics, etc., and some teachers have shown how largely the profitableness of these studies may be increased by using drawing as a means of training observation and expression. Most of our common school studies are capable of making large use of the hand in observation and expression, thus increasing its manual skill, and furnishing a powerful means of expressing thought.

That which has been said refers to the most prominent types of manual

training schools. If we were to consider all of the schools representing in various forms manual training, we should have a great variety; such as schools for sewing, the Kindergarten, schools for carving, and a few industrial art schools. In all of these we see the tendency to specialties rather than to breadth of training. It is interesting to note, in this connection, that some persons believe that the industrial art school offers all that is needed in the way of manual training.

Reflection will show that the average manual training school gives its attention almost solely to the mere *construction* of things; while the industrial art school on the other hand "gives its attention almost entirely to *beautifying* things. Naturally the question suggests itself, should not the *construction* and *beautifying* of objects be *studied together*? Can we afford to make the æsthetic side of our study secondary? Certainly not. The best educators are agreed that the study of the beautiful is of the first importance; for combined therewith are those moral ideas which should be dominant in any educational system. Pupils in observing and expressing the thought in things should, in addition to purely utilitarian ideas, bring out those ideas of beauty and refinement which create a desire for, and appreciation of, the beautiful. Without these ideas more fully brought out than at present, we cannot develop a high order of national taste, nor a world-wide market for our productions.

We now ask your attention to the relation which drawing has to the study of things. First it must be remembered that the single word "drawing" is really not broad enough to include all that is ordinarily placed under its heading. Neither are "art education" nor "industrial drawing" perfectly satisfactory. Drawing is one of the outgrowths of the study of the *form of things*. Considered in this light it becomes evident that drawing as a study has much in common with manual training. Each of them primarily lead pupils to *observe form* by the active exertion of their own minds. We recognize the truth of what Spencer says, that *observation* is "the process of acquiring knowledge on which all after-knowledge is based," that "we shall find that exhaustive observation is an element in all great success," and to quote Pestalozzi, "observation is the absolute basis of all knowledge." We do not ask pupils to accept our statement of facts; we ask them to investigate, to observe for themselves, to trust their own powers, to be independent, persevering, and sincere.

That drawing and manual training, in cultivating observation, are common in aim cannot be questioned.

In every branch of common school study a secondary step in fixing knowledge and in giving additional training is to lead pupils to show that which they know by some form of *expression*. For this purpose in connection with various studies we use language, oral and written, drawing, painting, modelling, and construction (i. e. making things). In using

these means of expression we exercise the hand and eye, the principle means employed in observing. This double exercise of the hand and eye: first, in gaining knowledge, and second in expressing it, tends to their more complete training. Comenius says, "That this is the true method of procedure is manifest; for first external things are *impressed* on the senses, then the mind seeks to *express* what it has received." Mr. Ham says, "The prevailing methods of teaching fill the head but do not provide for assimilation, recreation, and expression. Now to assimilate, to reduce to practical value and put to use facts memorized, and to create, the power of expression is an essential prerequisite; creating is expressing ideas in concrete form. But under the old *regime* of education only two modes of expression are provided—speech and writing. A third mode—drawing—has been very generally adopted. Drawing, however, is only the first step, an incomplete step, so to speak, of expression. It is a sign, an outline of a thing. What we want is the thing itself."

Manual training and industrial drawing employ similar means of *expression*—both employ language, both employ drawing, and both employ construction.

Considering the most important tools required by expression in either drawing or manual training, we find the pencil, the brush, the box of drawing instruments, the T square, scissors, knives, and the "universal tools," the hammer, the saw, etc., already mentioned. Of these means the pencil, the brush, and the compasses are inexpensive, easily obtained, and lend themselves readily to expression by means of drawing and painting. The scissors, knives, and contents of the family tool chest, also easily obtained, lend themselves to expression by construction. These means obtainable everywhere make it possible to develop in all schools elementary manual training founded on correct educational principles.

A system that employs shops and special instructors can secure of course the most complete results. But there is a difference of opinion as to the advisability of attaching the workshop to the school. It will be impossible to incorporate them generally with country schools. However, there is a growing belief that drawing and some accompanying exercises in construction would be a valuable adjunct to our system of education. Expression by drawing is well carried out in many of our schools, not only as a special study but in its application to others. The question now to be determined is the manner and extent to which the constructive feature should be developed.

We recognize the fact that the manual exercises of the kindergarten, and those of the special school for boys of thirteen and over are the same in character. That which we say is with special reference to supplying a "link" which shall connect the work started in the kindergarten with the special school or high school, by suitable exercises in the primary and grammar grades.

It is agreed that the mind must in part have its training through the hand. On this point Dr. Woodward says : " For the lower grades a daily allowance of one hour for drawing, modelling, cutting, pasting, gluing, and sewing would be enough for positive manual training. Natural history work in the direction of botany, entomology, and ornithology,—for all of which manual training is a necessary preparation,—should also appear on the daily program." While Prof. Boyden, of Bridgewater, says: " This training of the mind to use the hand with the other senses in the study of objects, in experimenting, observing, inferring, recording ; in writing, drawing, moulding, painting ; in making the simple apparatus necessary for illustrations and experiments, and the use of knowledge, is the kind of manual training which is necessary, practicable, and profitable in the public school."

Time will not allow me to speak of the extent and manner in which these ideas have been developed. Efforts outside of the various manual training schools seem to have tended in one of two important directions. First, in the production of industrial exhibits, and second in making the construction of objects an outgrowth of the study of drawing. In the first class of work there is no educational connection with the public school work ; it is in no way related to systematic teaching. The chief aim seems to be simply to get the pupils to make *something*. Such efforts are productive of more or less good in the way of training and knowledge ; but are the results comparable with exercises of the second class in which the work is first planned on paper as a part of the regular instruction in drawing, and then constructed from the drawings ? Such a method clearly implies procedure according to educational principles. The efforts of the pupils are under the guidance of the teacher, and the results are more truly the exponents of systematic, profitable thought. Whereas the industrial exhibits, not made an outgrowth of drawing, are spasmodic efforts, the continuance of which is questionable after their novelty shall have worn away.

It is agreed that drawing is an important, indispensable means of manual training ; incorporate with it the construction of objects, and you will have a method of instruction which is possible alike to city and country schools.

As all things are embodiments of form, and as the study of all form is based on geometry, it becomes evident that proceeding according to educational principles we should first study typical geometric forms as wholes—that we should subsequently analyze and study their details—afterwards considering their application to various objects ; that at every stage the thought they represent should be expressed by the threefold means, language, drawing, and construction. The tools employed being the pencil, the brush, the triangle, T square, compasses, and contents of the family tool chest.

The materials employed must be determined by the age of the pupils, and their ease of manipulation. Paper, wood, cloth, and similar materials have been found most useful, while the working of metals seems to present greater difficulties. The successful accomplishment of such work will oblige us to furnish simple materials, particularly paper, cardboard, and wood. It may also be found desirable to provide simple tools. Some teachers have already provided them. It is to be hoped that parents will encourage this work by providing tools.

It is absolutely necessary that the work shall be the student's own, otherwise the tendency will be towards dishonesty. We must bear in mind that careful and accurate expression either of language, drawing, or construction, will result in acquiring ideas of truth, which will show themselves, not only in things, but in actions.

It has been hinted that beauty is almost invariably an accompaniment of every form. An element which enters so largely into every object deserves marked attention. There is hardly an object in which are not combined thoughts of beauty. Every article of furniture, every building, every plant, every rock, all bring beauties to our attention. These manifestations of beauty tend towards refinement and morality. To omit such important elements in our general study of form with reference to training hand, eye, and mind, is to commit a grave error. But what is known as industrial drawing does not make such an omission—on the other hand manual training schools give it slight attention.

Exercises in invention or design form an important feature of our best systems of drawing, and, if properly developed will do much in bringing out the advantages which come from considering the beauty of forms.

We would not have it understood that we depreciate the work of the manual training school nor of other schools similar in character. The establishment of special manual training schools to supplement the grammar schools will undoubtedly be of great value. Special schools for wood carving, designing, sewing, etc., will also be of value, but the important matter for us is to consider what constitutes the features of a system applicable to all schools, in city or country, graded or ungraded. What can be done without special teachers, appliances, and workshops, and still have our work based on educational principles?

There can be no doubt that industrial drawing, or art education, as you please to call it, will form the basis.

That manual training which finally secures a recognized position in our primary and grammar grades must be broad in its aim. In that view many proposed schemes have doubtful features. For instance, a popular writer says, "The manual training school is a kindergarten for boys." For our purpose that definition would not answer. For a system broad in its aims must include the girls.

The decided tendency of existing manual training schools towards particular pursuits is open to criticism. Hon. E. E. White says, "For over five years I had close official relations to one of the best managed school workshops in the country; and I have no hesitation in saying that its chief value was as a preparation for mechanical pursuits, not for all pursuits." Further Prof. Boyden says, "When manual training is extended to the carpenters, the wood-turning, the founding, forging, and machine tool laboratories, we have passed beyond the public school into the technological schools, which are for the *special* training of those who are to direct or perform skilled mechanical labor in the trades."

The discovery and application of thought as embodied in things will answer as a broad foundation for manual training, and the best study adapted to these ends is what is popularly known as *industrial drawing*. For this study not only gives a general training applicable to a great variety of pursuits, but is of the greatest value in developing every common school study at all related to form. Not only does it develop purely utilitarian ideas but also cultivates an appreciation and love of the beautiful in nature and art. Its development is in the direction of usefulness, beauty, and morality. It gives opportunity for development in every desirable direction. It leads to the observation of things, and to their expression by language, drawing, and construction. It stimulates the inventive faculty. It cultivates a knowledge of design, and in brief, gives a broad, general training to all boys, to all girls, in preparing them for every sphere of life. Of such education Dr. Dickinson says, "It has been found that those who take up the work of life with minds trained to observe, to analyze, to generalize, and to reason, joined with that self-control which enables one to turn his full attention to whatever he desires to do, soon outstrips all others in the amount and character of their efforts."

We have aimed to show the importance of industrial drawing as a basis in devising plans for manual training suitable for primary and grammar grades. Upon you as specialists devolves an important duty towards the public schools. By your influence it will be possible to augment what seems already commenced,—a *revival of interest in industrial drawing*. You have the opportunity to present a study which is of the greatest importance. You can turn the interest in industrial exhibits and manual training to good account. Bear in mind that drawing is of universal application, and, consequently, must be of general usefulness.

That which has been done so far is simply a beginning. Advancement is dependent on original thought, on the application of that habit of mind which we aim to develop.

Remember that after all, *mind* is the great controlling force. Do not occupy yourselves too much with mere details. Strive to keep before you

those great educational truths, which though few in number have done much to cause the intense interest now manifest in all departments of education.

Thus shall we cause our work to be recognized as the most important means of realizing in our schools generally, the highest aims of either manual training or industrial drawing.

INDUSTRIAL DRAWING.

OUTLINE OF AN EIGHT YEARS' COURSE OF INSTRUCTION FOR PRIMARY AND GRAMMAR SCHOOLS, USED AT THE MASS. NORMAL ART SCHOOL, AND IN STATE WORK UNDER DIRECTION OF THE MASS. BOARD OF EDUCATION, BY
CHARLES M. CARTER.

NOTES.

Industrial drawing as here presented is regarded by many educators as the *foundation of industrial training*.

It gives skill in the use of hand and eye, good habits of thought, and appreciation of the beautiful.

Drawing and designing are here combined with the *construction* of objects.

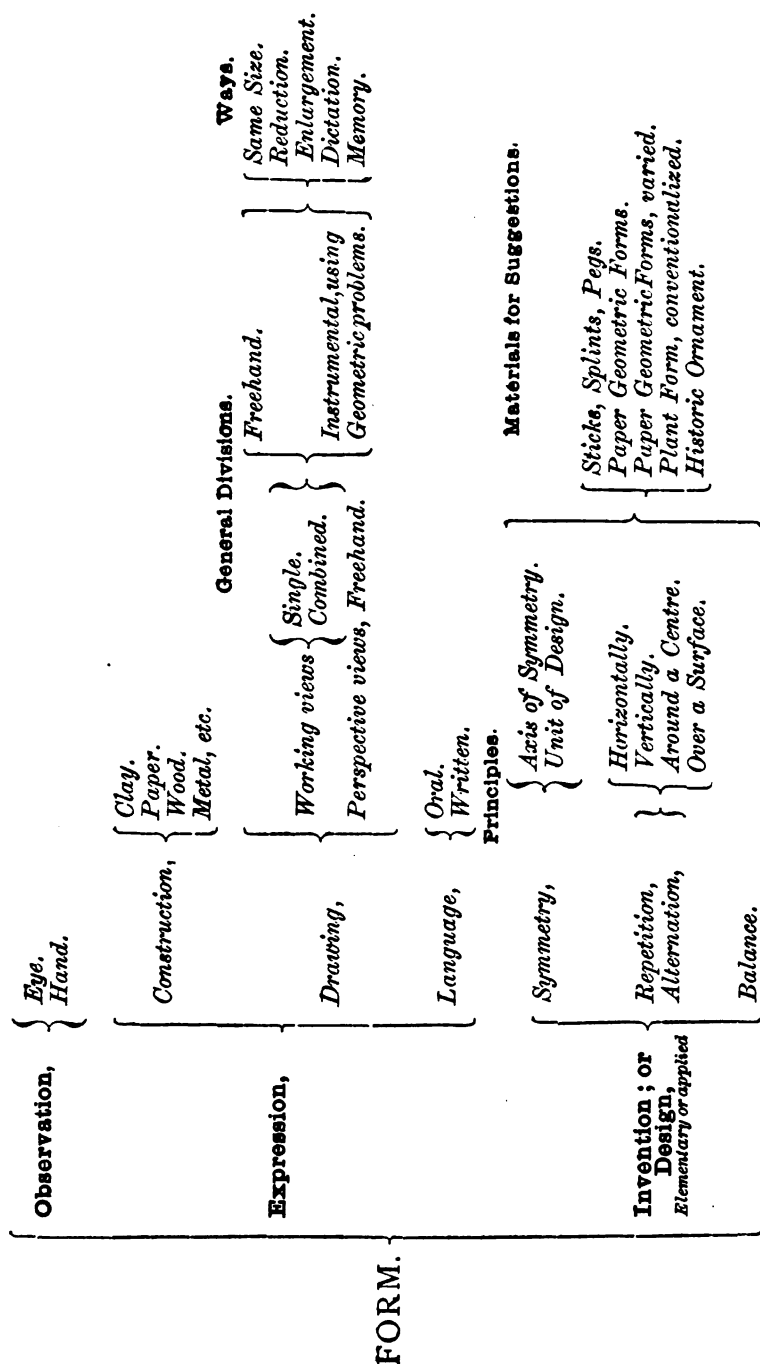
Where workshop instruction is introduced, the drawings and constructed work may be of practical examples referring to courses in manual training. This plan shows how the natural tendency of children to occupy themselves in making objects at home, can be made fruitful by intelligent direction.

The plan is arranged so that it may be incorporated with courses of study prepared by school committees.

It may be used either with or without textbooks. Using it as a basis, teachers can determine whether to omit, or add to the exercises of the book.

All work may refer to the following of their combinations:—

1. Working Drawings.
2. Perspective Drawings.
3. Invention or Design.
4. Constructed Objects.



OUTLINE OF EACH YEAR.

Ideals of form come from *Observation*, they lead to *Expression*, and may be combined into new forms by *Invention or Design*.

FIRST YEAR.

Ten minutes daily, using slates and blackboard.

OBSERVATION of the forms of objects in each year, by eye and hand.

Expression.

Employing Construction, Drawing, and Language.

GENERAL FORM OF OBJECTS. Sphere, Cube, Cylinder, Square Prism, Triangular Prism. Teach objectively as wholes. *Construct* each of clay. Observation and expression further developed by moulding simple objects based on them; as an orange, dice, stick of candy, etc. From the objects first used teach the *common qualities* of form, viz.: SURFACE, *plane* and *curved*; LINE, and POINT.

Commence teaching and representing the details of these qualities from models and objects.

I. POINTS: *Position*,—Centre, Above, Below, Right, Left.

II. LINES: *Direction*,—Straight, Curved; *Position*,—Vertical, Horizontal, Oblique; *Relation*,—Parallel, Perpendicular, Inclined; *Color*,—Light, Dark. Dividing into halves and fourths.

III. ANGLES: Right, Acute, Obtuse.

Objects and figures containing the above should be drawn.

Invention.

Optional. If taught, to be similar to that of the second primary year.

SECOND YEAR.

Fifteen minutes daily, using slates, paper, and blackboard.

Review work of the first primary year, including moulding.

Expression.

Employing Construction, Drawing, and Language.

From the following models:—Triangular Prism, Square Prism, Pyramids, etc., teach:—

IV. TRIANGLE: Right-Angled, Isosceles, Equilateral.

V. SQUARE: Diagonals, Diameters.

VI. OBLONG.

Judging, Measuring, Dividing, and Ruling Distances.

Draw SINGLE FREEHAND WORKING VIEWS of models, objects, and ornament, illustrating the above plane figures. *Construct* them of clay, paper, wood, etc.

Substitute paper for the slate during the last half of the year.

Invention.

PRINCIPLES. Symmetry, Repetition, and Alternation.

MATERIALS. Sticks, colored paper Triangles, Squares, etc.

Teach pupils to arrange the materials so as to express the principles. Subsequently replace the materials by lines. Tracing around units allowed.

The materials may also be used to represent various objects, as house, ship, etc. Teach the names of colors represented by the sticks and papers, and cultivate a taste for beautiful combinations.

Combine at times, in the same lesson, form, drawing, invention, color, arithmetic, language, etc.

THIRD YEAR.

Thirty minutes three times a week, using paper and blackboard.

The first exercises review the work of previous grades, in order that special attention may be given to the proper use of paper and pencil.

Expression.

Employing Construction, Drawing, and Language.

From Models and Objects teach:—

VII. CIRCLE: Semi-circle, Quadrant, Circumference, Diameter, Radius.

VIII. ELLIPSE: Long Diameter, Short Diameter, Foci.

IX. OVAL.

Draw SINGLE FREEHAND WORKING VIEWS of models, objects, and ornament, illustrating the above plane figures. *Construct* them from drawings, using wood, paper, etc. Compare the beauty of curvature illustrated by different forms.

Invention and Design.

PRINCIPLES. Symmetry, Repetition, and Alternation.

MATERIALS. Colored Paper geometric forms both simple and varied. When pupils create the variations of units, the arrangements are called designs.

Ruling allowed. In all grades teachers should be familiar with the principles of growth, contrast, repose, etc.

FOURTH YEAR.

Thirty minutes three times a week: using paper and blackboard.

Review the Circle, Ellipse, and Oval.

Expression.

Employing Construction, Drawing, and Language.

From Models and Objects teach:—

X. COMPOUND CURVES. REVERSED CURVES.

XI. HEXAGON.

XII. PENTAGON.

XIII. OCTAGON.

XIV. SPIRAL.

Draw SINGLE FREEHAND WORKING VIEWS of models, objects, and ornament, illustrating the above plane figures. *Construct* the plane figures, and objects based on them, of paper, wood, etc.

Design.

PRINCIPLES. Symmetry, Repetition, and Alternation.

MATERIALS. Conventionalized Leaves, Flowers, and Buds.

Ruling allowed.

In all work strive for beauty of form.

FIFTH YEAR.

Thirty minutes three times a week; using paper and blackboard.

Expression.

Employing Construction, Drawing, and Language.

From Models and Objects teach and draw:—

FREEHAND WORKING VIEWS, single and combined, illustrating Plans and Elevations. *Construct* the models of paper, first making simple *developments*. These models will be useful in teaching Freehand Perspective.

PERSPECTIVE VIEWS, *Freehand*. The effects of foreshortening and distance explained in connection with drawing spherical objects, circles, cones, cylinders and objects based on them. Explain that in a *Working View* the eye is supposed to be opposite each part of the view represented. In *Perspective Drawing* the eye remains in one position.

Design.

PRINCIPLES. Symmetry, Repetition, and Alternation.

Making arrangements on given main lines introduced.

MATERIALS. Conventionalized Plant Form. Use ruler and tracing paper.

Designs may be *applied* to objects, as pen-wipers, book-marks, etc., *constructed* by pupils. In this and the following years have pupils take "main lines" from good examples and clothe them with different material. Cultivate taste by comparing examples of good and bad design.

SIXTH YEAR.

Thirty minutes three times a week; using paper and blackboard.

Expression.

Employing Construction, Drawing, and Language.

From Models and Objects teach and draw:—

WORKING VIEWS, Freehand and Instrumental, single and combined, Two views given to find a third. Marking dimensions. Simple sections. *Construct* simple objects from Working Views, especially models useful in Freehand Perspective.

GEOMETRIC PROBLEMS, and their applications.

PERSPECTIVE VIEWS, *Freehand*. The convergence of parallel lines. Drawings made from the cube, oblong block, etc., and objects based on them.

Design.

PRINCIPLES. Symmetry, Repetition, and Alternation.

MATERIALS. Conventionalized Plant Form.

Use Rulers, Compasses, Tracing Paper, and Geometric Problems. Make more elaborate bisymmetrical arrangements, with and without outlines. Exercises may be planned in which designs are applied to objects constructed by pupils. *Historic Ornament* or *Naturalistic Views of Plant Form* occasionally. Use them as a means of cultivating taste.

SEVENTH YEAR.

Thirty minutes three times a week; using paper and blackboard.

Expression.

Employing Construction, Drawing, and Language.

From Models and Objects teach and draw:—

WORKING VIEWS. *Freehand and Instrumental*, Single and combined. Marking dimensions. Advanced developments. Simple intersections. From measurement make full sized, and scale drawings; also encourage home construction from drawings of such objects as Lamp-shades, Picture-frames, Foot-stools, etc.

GEOMETRIC PROBLEMS completed.

PERSPECTIVE VIEWS. *Freehand.* General Review. Prisms, Pyramids, Plinths, and objects based on them; Groups, Tinting.

Design.

PRINCIPLES. Symmetry, Repetition, Alternation, and Balance.

MATERIALS. Conventionalized Plant Form and Details of Historic Ornament.

Use Instruments, Tracing Paper, and Geometric Problems. Designs may be applied to objects constructed by children, such as Lamp Mats, Pin Cushions, Match Boxes, etc.

HISTORIC ORNAMENT OR NATURALISTIC VIEWS OF PLANT FORM, occasionally.

In all exercises cultivate appreciation of the beautiful.

EIGHTH YEAR.

Thirty minutes three times a week; using paper.

Expression.

Employing Construction, Drawing, and Language.

From Models and Objects teach and draw:—

WORKING DRAWINGS. *Freehand and Instrumental.* Instrumental work to employ the T Square, Scale, Triangles, and Drawing Board. Practical illustrations of drawing applied in industrial pursuits, Sections, Intersections, and Developments. Continue to encourage home construction from drawings of useful objects; such as Boxes, Bird Houses, Tool Boxes, Brackets, Trays, etc.

PERSPECTIVE VIEWS. *Freehand.* Frames, Crosses, and objects based on them. Leaning objects, Groups, Tinting.

Design, Optional.

PRINCIPLES previously studied combined with those of Applied Design.

MATERIALS. Conventionalized Plant Form, Historic Ornament, Nature.

Design Wall Paper, Inkstand, Paper Weight, Hinge, etc. Occasionally have objects designed that may be constructed by needlework, etc. *Miscellaneous ornament illustrating the highest forms of beauty.*

Use Drawing freely each year in illustrating other studies.

ART EXHIBITION.

The Art Exhibition at Library Hall, in connection with the meetings of the Art Department, was one of the most attractive places during the meetings of the National Educational Association.

The hall was so crowded constantly that it was impossible to hold the meetings of the Department there.

The exhibition was planned and arranged by the President of the Art Department, Walter S. Goodnough of Columbus, O., and in some respects was the best ever held at a meeting of the National Association. The hall was a beautiful one, being built expressly for Art purposes. It was finished in hard woods, with nicely tinted walls and top light. The walls were hung with a fine collection of autotypes, and a large and excellent selection of casts, imported expressly for the building, filled all available places. A beautiful little stage, delightfully furnished, hung with fine draperies, and set off with several full length pieces of statuary, occupied one end of the hall.

The following cities and institutions were represented in the exhibition: The public schools of St. Louis, St. Paul, Cincinnati, Columbus, Cleveland, and Nashua, N. H., Cook County, Illinois, Normal School, and Tulane University, New Orleans.

ST. PAUL PUBLIC SCHOOLS.

On the south wall and table was an excellent exhibit from these schools. Work was shown from the eight primary and grammar and three high school grades. Drawings, showing work in construction, representation, and decoration, filled the walls, and on the table was a large and varied collection of objects, made by the pupils in connection with their study of drawing. The Primary pupils model of clay the geometric solids, and other simple, common objects founded on them. A great variety of simple designs were made with splints, sticks, shoe pegs, wire, and clay balls. Many designs and forms were made after the Kindergarten fashion, by folding or cutting of colored paper. Casts of natural leaves were made in clay in the study of conventionalism in design; and as an application in the study of construction, pupils were required as home work, to make some object of their own selection, different from those in the drawing books. There were bedsteads, book cases, chairs, sleds, guitars, banjos, and a great variety of tools, implements, and utensils. Miss Ada M. Laughlin, Supervisor of drawing in St. Paul, was in charge of the exhibit.

COLUMBUS, OHIO.

One of the exhibits that attracted constant attention, and received much praise, was that of the Public Schools of Columbus, Ohio, in charge of Prof. W. S. Goodnough, Superintendent of Drawing of that city and President of the Art Department. This exhibit filled all the north side of the hall and one hundred feet of table room, and included work from all grades, from the lowest primary through the high school, and tracing the course of the pupil through his twelve years of school life, it is wonderful to see what he accomplishes in the short space of one hour and a half a week. In the lowest grades, pupils get their first ideas of form from objects, then shape them in clay. They commence designing by arranging sticks and surfaces in pleasing forms, and are taught to cut from colored paper all the geometric surfaces that occur in their study, as a means of getting better acquainted with the forms, and as a simple way of developing manual or hand work in connection with drawing. The drawing on slates showed extremely accurate work for six-year-olds.

The drawings were arranged in three horizontal rows, the lower being construction, or that kind necessary for the making of things; the middle row showed representation, or that required to represent things pictorially, and on the top row was decoration, or that used in the ornamentation of things. Each of these general divisions was developed gradually through the primary and grammar grades, reaching its complete development in the high school.

Under the head of construction were front, end, top, bottom, and sectional views of geometric solids, and simple common objects, being full working drawings of the same, developments, or patterns, such as the sheet metal worker requires, full working and detail drawings to scale of various tools, implements, and pieces of machinery, all made from objects, and finally architectural drawings in color of plans, framing drawings, inside and outside details, sections, and elevations for houses in wood, brick, and stone.

On the table was a great variety of objects made by the pupils from their own working drawings, as an application of their knowledge of construction drawing, and to develop manual skill, and form a taste for mechanical pursuits. This was all optional home work, and consisted of geometric solids, knives, tools, and utensils of various kinds, chairs, tables, and other furniture, houses, etc.

The line of representation showed drawings from objects entirely, consisting of simple views of slates, envelopes, watches, horse-shoes, and such objects in the lower primary grades; single geometric solids and common objects in the lowest grammar; and in higher grades, groups of geometric and common objects, furniture, plants, and plaster casts in outline; then

light and shade work in crayon and stump of groups of objects and casts; and finally still life groups with drapery, in crayon and in water color.

In the upper row or decoration were simple elementary designs, teaching first principles, designs for surface decoration, tiles, wall papers, etc.; and finally in the high school excellent paintings in water colors of flowers, and an analysis of them for design, beautiful designs being made from the given plants in color, for wrought iron work, carved wood work, china ware, tiles, wall papers, carpets, etc.

On the tables also were bound volumes of the books used by pupils, each volume showing twenty books all from one room. Every one remarked on the great uniformity of the work in the books. The Columbus exhibit was admitted by all to be a splendid one, the high school work in particular.

ST. LOUIS, MISSOURI.

This exhibit included work from the third to the eighth year grades of the public schools, drawing books from all grades, home exercises, and examination sheets for admission to the high school, clay modelling from the first grades, paper cutting from models made at home by pupils of all grades, and modelling in clay by normal students.

Nearly all the mounted drawings were made directly from objects, beginning with those of two dimensions and advancing gradually to difficult groups.

The working drawings showed the same gradual progression. The two upper rows of drawings begin with representations of natural leaves and their conventionalism, leading up to bilateral designs. A high degree of artistic finish is shown throughout. On the tables is a great variety of "made" work and the clay modelling by Normal students called forth many expressions of praise. Miss Josephine Locke was in charge of this work.

CINCINNATI, OHIO.

The public schools of this city, represented by Miss Christina Sullivan, occupied wall space about equal in amount to St. Paul and Columbus, and showed work from all grades and from the Normal school. The plan pursued was different from that in the cities already mentioned, the construction work being almost entirely omitted, and there being no manual work. There seems also to be less work from objects, the instruction tending largely to the subject of design. There were many excellent designs. In the high school these were principally in colors. There were also a number of shaded drawings from the high school, and some natural history studies in white lines on black card, by Normal school students.

CLEVELAND, OHIO.

The drawing in the public schools of this city is in charge of Mr. Frank Aborn, and the system used similar to that in Cincinnati. The work seemed, however, to be more of a pictorial or sketchy nature, great stress being laid on off-hand sketching from objects, with a view to acquiring facility with the pencil and quickening the observing faculties. In addition to designs and sketches from objects, were drawings of historical ornament and some construction drawing.

NASHUA, NEW HAMPSHIRE.

This exhibit, the result of but eight months' instruction by a special teacher, Miss Abbie M. White, was very attractive and praiseworthy.

Models were used extensively, pupils making working drawings of the same, and reproducing them in clay, pasteboard, paper, or cloth. Every pupil in the Nashua schools is supplied with scissors for cutting, and clay is used in every grade. The designs were mostly formed of colored paper or cloth, cut and arranged by the pupils, and the drawing showed evident appreciation of form and facility of execution. This exhibit was strong evidence of what may be accomplished, when correct and improved methods and well trained, competent teachers are employed.

TULANE UNIVERSITY.

The work from this institution had been done under the instruction of Prof. W. Woodward, and consisted of drawings from free evening classes of mechanics and artisans, and of the Saturday classes of teachers in the public schools. The work from the latter class showed designs of clay, sticks, wire, and drawings, in the various subjects necessary to prepare teachers to teach this branch.

From the evening classes were geometrical problems, simple objects in outline, machine details, machinery, furniture, buildings, etc.

NORMAL SCHOOL, COOK COUNTY, ILLINOIS.

This exhibit, in charge of the Misses Montfort was entirely different from the others, showing drawing in its application to other studies.

Drawing, and to a considerable extent water color, was used to illustrate the subjects of history, natural science, numbers, geography, topographical and plain map drawing, mensuration, botany, geology, descriptive geometry, mechanics and engineering. There were also various geometrical forms and models made by the pupils.

MISCELLANEOUS EXHIBIT.

In one of the small rooms was a general exhibit from various sources, collected by a special committee to illustrate the application of drawing to other studies. It showed conclusively that there is scarcely a study that may not be better taught or materially aided by the use of drawing, or modelling, either by the teacher in presenting the subject to the class, or by the pupils in illustrating their ideas and conceptions.

APPENDIX A.

REPORT OF A COMMITTEE.

7 PARK STREET, BOSTON, June 3, 1886.

At the meeting of the Art Department of the NATIONAL EDUCATIONAL ASSOCIATION, held at Saratoga, July, 1885, a committee was appointed to consider the relation of drawing to other studies in the school curriculum, and how its use as a means of illustration in this direction may best be promoted.

The committee desire to gain information as to any use made of drawing in connection with other studies. They also desire information as to the use of *making* from any material, clay, wood, paper, cloth, etc., as a means of illustration in the studies of the school curriculum, and would respectfully ask your assistance.

Would you kindly secure answers to the questions in the enclosed circular from those progressive teachers in your city who are making use of the best methods in teaching, and send the answers to the chairman of this committee.

In addition to such answers, the committee would be very much pleased to receive any illustrative work in drawing or making that has been done by pupils while pursuing the various studies. Such work would be of great service, and would receive the most careful treatment.

Very respectfully,

MRS. MARY D. HICKS, *Boston.*

WALTER S. PERRY,

Supervisor of Drawing, Worcester.

ANSON R. CROSS,

Normal Art School, Boston.

CIRCULAR FOR INFORMATION REGARDING DRAWING AND MAKING,
USED IN CONNECTION WITH SCHOOL-STUDIES.

1. Name of town ?
2. Grade of school, whether primary, grammar, high, academic, normal ?

3. Name of teacher?
4. Please state fully what use you make of *drawing* as an aid in teaching the different studies, giving at the same time the average age of pupils.
5. Do you require pupils to *make* any objects illustrative of form, that the study may be better understood?
6. In what study or studies have objects been made?
7. What objects have been made?
8. Would you be willing to contribute some of your own work or the work of your pupils to an exhibition to be made at Topeka, at the National Educational Association, for the purpose of showing how drawing and making may be used to promote an intelligent understanding of the various studies? If so, what can you send?
9. If you contribute, please have each article marked with the name and age of pupil, the grade of school, the town from which it comes, and the study which it illustrates, and forward to

MRS. M. D. HICKS,
7 PARK STREET, BOSTON, MASS.

APPENDIX B.

EXERCISES INTRODUCING DRAWING AND "MAKING" INTO OTHER STUDIES.

I.—GENERAL EXERCISES.—IN THE GARDEN.

WORK FOR BUSY HANDS.

(Preparatory.)

NOTE.—The following are suggestions of the work that pupils may be allowed to do, in the spring, as a preparation for botanizing.

Fill small boxes with earth. Plant seeds of various kinds, marking each lot with proper labels. Keep them supplied with moisture, warmth, and sunlight. Place a cutting of ivy in water. Obtain the following plants from gardens, roadsides, or fields, and transplant in boxes of earth:—Dandelion, crocus, cowslip, strawberry, violet, lily-of-the-valley.

Get some of the following vegetables from the market, and place them in earth until they begin to sprout:—Carrot, radish, turnip.

WORK FOR EYES AND FINGERS.

NOTE.—This work may be given to quite young children, as no scientific names are introduced. The object is, not to teach botany, but to provide exercises for observation, reflection, and expression. By furnishing specimens, and a list of questions and directions to each pupil, the work may be done while the teacher is otherwise engaged.

ROOTS.

Distribute specimens of tap-root, as parsnip, carrot, turnip, and a few of the varieties of fibrous roots.

Make a drawing of each of these roots.

What color are they ?

Compare the roots of the corn and the carrot, and write out the differences.

Where do the thread-like fibres of the corn start from ?

Place in one group all the plants that have one large root. Write a sentence about them.

Put in another group all that have a number of roots about the same size.

Take out those that have small thread-like fibres. Describe those that remain.

Ans.—A few more directions, corresponding with the character of the plants the teacher is able to obtain, may be added. A representative of each kind of root may be drawn on the board by the pupils producing the best work, and the teacher may write underneath the proper name.

STEMS.

Distribute corn, tomato, and bean plants.

Make a drawing of the stems of each.

What difference do you see in the stems of the corn and tomato ?

Which is the bean most like ?

In what is the bean like the tomato ? How does it differ ?

What do you find at the top of the tomato stem ? What is it composed of ?

Do you find others in any other place upon it ?

Which of the other plants has a bud at the top of the stem ?

What can you say of the surface of the tomato stem ? What of the others ?

LEAVES.

Distribute corn, lily-of-the-valley, tomato, violet, bean, and pea.

Make a drawing of each leaf.

Which of these leaves are composed of several parts ?

What difference between the shape of the leaf of the lily-of-the-valley and that of the violet ?

Which has a stem ?

What other leaf has a stem ?

Which leaf-stem grows from the roots of the plant ? Which from the stem of the plant ?

Which leaves have veins running one way ?

What other leaves have the same ?

How do the veins of the tomato leaf run ? Of the violet ?

Which leaf has a smooth edge ? Describe the edges of the others.

What kind of a surface has the tomato leaf ? What can you say of the others ?

WHAT IS IN A SEED.

Ask each pupil to bring a number of seeds of as many kinds as possible, but especially beans, peas, corn, oats, and squash or cucumber. Put one or two of each kind in wet cotton, and plant the others in moist earth. As soon as the seeds have sprouted enough to show the parts, dig up a bean and a corn sprout for each pupil, leaving the others for another occasion. Sometimes a sprouting acorn or chestnut can be obtained which shows the parts of seed very plainly. Distribute specimens to each pupil, and with them a slip of paper containing the following directions, for the work which they are to produce upon another slip of paper: The notes marked with asterisk and dagger may be placed at the bottom of the slip to assist the pupil in answering No. 7.

OUTLINE ONE.

1. Make a drawing of each plant.
 2. How many parts has the corn?
 3. How many has the bean?
 4. Which has two thick, fleshy parts that look just alike?
 5. How many slender parts has each plant?
 6. What difference can you see between the two slender parts of the corn? Between the two slender parts of the bean?
 7. Find a name for the two slender parts of the bean.* For the thick fleshy parts.†
 8. How many *seed leaves* has the bean? How many has the corn?
 9. Where were the *stem* and the *root* before the seed was planted?
 10. Tell what you know about planting seeds.
- * The slender part that looks like a bud is the *stem* or *stalk* of the plant; the other slender part is the root.
- † The thick, fleshy part is called the seed leaf. Some plants have two seed leaves, some one.

A few days later when the stalk and roots have acquired more of their characteristic appearance, distribute specimens of corn, beans, peas, and oats, and the following outline of work:—

OUTLINE TWO.

1. Make a drawing of the corn plant.
 2. Write the name of the plant above the drawing.
 3. Find the *stem*, the *root*, and the *seed leaf*, and write the names by the side of these parts in the drawing.
 4. Do the same with the bean, wheat, and pea.
 5. In what direction does the stem grow?
 6. In what direction the roots?
 7. What do the roots do for the plant?*
 8. What will be found on the stems of these plants when they are full-grown?
- * The plant's food is in the earth; the roots suck it up and send it to all the parts.

II.—AN EXERCISE IN THE COOK COUNTY NORMAL SCHOOL.

NUMBER.

BY MISS BELLE THOMAS.

In this room we found about fifty pupils belonging to the first and second primary grades.

The second-year pupils were at their desks busily preparing a number lesson. The following problems were written upon the blackboard:—

How many petals have 5 violets?

How many quarts in 3 gallons?

Bought milk at 16 cents a gallon, what are three quarts worth?

Grace had 24 violets, Ruth $\frac{1}{2}$ as many, Alice $\frac{1}{4}$ as many as Ruth, and Irene 5 more than Alice; how many had each?

Ray sells 3 pansies for 7 cents; how many did he sell for 21 cents?

On examining the slates we found the first two copied and the answers written; the other three they were illustrating with original drawings.

The most advanced group of the first-year pupils were copying the following problems, and illustrating each one with little drawings:—

How many feet has this old hen and her three little chicks?

There are 9 robins on a tree, and $\frac{1}{2}$ as many on the fence; how many on the fence?

May had 12 violets, she gave $\frac{1}{3}$ of them to Jack; show me Jack's violets.

There are 8 buds on one twig and 3 on another; how many buds?

There are 10 eggs in a box, 1-5 as many in a basket; how many in the basket?

III.—GEOGRAPHY.

AN OUTLINE FOR ORAL TEACHING OF PRIMARY GEOGRAPHY, BASED UPON THE INDUCTIVE AND SYNTHETIC METHODS.

BY MISS O. A. EVERS.

FIRST STEP.—PLACE LESSON.

1. Terms on, upon, under, in, near, above, below, behind, around, before, long, short, broad, high, low, right, left, front, back, etc., developed.
2. (a) Cardinal points, and connection of sun with same.
(b) Series. Cardinal points.
3. (a) Location of children's homes.
(b) Directions of same from school building.
4. Teach that *right* and *left* are relative terms.
5. Drill upon length of lines, distances (inch, foot, yard, rod, mile, etc.)
6. (a) Represent schoolroom upon slate, blackboard, moulding-board.
(b) Same with an entire floor of building.
(c) With school yard.
(d) With the block or square.
(e) With the principal commons or parks.
7. (a) Get view of the place as a whole, if possible.
(b) Conversational lessons upon historical facts pertaining to the city or town.
8. Term *map* developed, and directions upon same taught.
9. Map of city studied.
(a) Its general physical features represented upon the moulding-board.
(b) Streets traced and blocks located.
(c) Natural features discussed and located.
(d) Conversational lessons about the surrounding country, towns, and cities near by.
10. Occupations of the inhabitants of the place and surrounding country discussed.
11. Teach that the State in which you live is composed of many farms, cities, and villages united.
12. Mould the State.
13. Map of the State.
(a) Find and locate the place in which you live.
(b) Locate the principal towns, giving the historical and other information about the same.
(c) Trace principal rivers, railroads.
(d) Note and describe natural features of the State.

SECOND STEP.—INDIVIDUAL FEATURES OF THE EARTH.

Surface of the Earth.	Land its uses	Highlands.	{ Hills Ints., their uses. Plateaus.	{ Observe nature and for illus- trations use mouldingboard relief maps and pictures.
		Lowland	{ Plains. Valleys. Peninsulas. Islands. Capes. Isthmuses.	
	Water, its uses.	Salt.	{ Oceans. Seas Gulfs, Bays. Harbors. Channels. Straits.	
		Fresh.	{ Rivers. { Source. Bed. Banks. Mouth. Uses.	
			{ Lakes. Ponds. Uses.	
		Other Forms.	{ Inlet. Outlet. Shores. Uses.	
			{ Dew. Clouds. Rain. Snow. Hail. Mist. Fog, etc.	{ Water power. Navigation. Irrigation, etc.
				{ Water power. Navigation. Irrigation, etc.

THIRD STEP.—THE EARTH AS A WHOLE.

THE EARTH.

Stories told and read, and conversational lessons given to develop idea of shape of earth. Pictures, drawings and globe used to illustrate.

See Scribner's Geographical Reader.

Johonnot's Geographical Reader.

"Our World," Miss Hall.

"Each and All," Miss Andrews.

"Seven Little Sisters," Miss Andrews.

"Little Folks in Feathers and Furs," Miller.

"Aunt Martha's Corner Cupboard," Kirby.

"Glimpses of the Earth," Blaikstan.

"Around the World," Prime.

"Little Lucy's Wonderful Globe," Yonge.

"Four Feet, Wings and Fins," Mrs. Anderson.

"Wonders of Vegetation," De Vere.

"Wonders of Water," De Vere.

"Spectacles for Young Eyes," Lander.

"Children's Fairy Geography."

"Four Feet, Two Feet, and no Feet."

"Manual of Commerce," Browne.

- | | |
|-------------------------------|---|
| 1. Form as a whole. | { Our position relatively.
Form. |
| 2. Surface. | { Of what composed.
Proportions of land and water. |
| 3. Horizon. | |
| 4. Night and Day. | |
| 5. Hemispheres: | |
| Eastern and Western. | |
| Northern and Southern. | |
| 6. Lessons on the Globe. | |
| See Swett's "Method," p. 233. | |

This work may be accomplished fairly well in five months' time.

Oral instruction and object lessons on plants, animals, and minerals, with especial reference to classifying same according to climate, should be given daily during the course.

IV.—AN ELEMENTARY GEOMETRY LESSON.

ALSO A TEST OF THE TEACHER'S ABILITY TO QUESTION.

By questioning lead the pupils to give first orally and then in writing the statements below. Say as little as possible. Ask no question that can be answered by yes or no. Try this experiment and see how well you can succeed.

1. All the angles of a cube are right angles.
 2. On the surface of a cube there are twenty-four right angles.
 3. Three of these right angles are at each corner and four on each face.
- Note.—Tell the pupils what a diagonal is.
4. Twelve diagonals can be drawn in the faces of a cube.
 5. Four diagonals lie wholly within the cube.
 6. There are twelve edges on a cube, all the lines of which are of equal length.
 7. A cube has six faces.
 8. All the faces of a cube are squares.
 9. All the squares of a cube are of equal size.

Let the above statements be united into a connected description of a cube. This exercise then becomes both a mathematical and a language exercise. After a few days, *without previous announcement*, place a cube on the table, and request the pupils to reproduce in writing all they can remember of this lesson. It thus will become a memory exercise.

The next day after this last test, prepare as many cubes cut from potatoes as there are members of the class. Let each pupil cut from each corner of each cube enough so that all the surfaces will have *equal areas*. The teacher should have a large cube of wood on hand and another previously prepared, as the pupils have been requested to do. Name this new solid. From it give ten statements like those we obtained from the cube.

LESSONS ON THINGS.

"One of the most noticed monographs is due to a teacher who has succeeded in putting her method even, before the public:—A certain number of sheets of cardboard present successively the flax in natural stems, then the flax combed (with a reduced model of the flax comb), the flax macerated, the flax broken, carded,

spun, then a small model of a loom, finally several samples of linen. But below each sheet is found the requirement from the pupil indicated: the requirements, one day, to bring samples of flax in such and such a condition; another day, to draw it; another to write a *résumé* of the explanation that has been given; another day to make a pattern of warp and woof after the lesson; another day to ravel out a bit of linen, in order to put the woof in evidence, etc. Is there not instruction through the eyes and hands completing and vivifying the instruction through the books?

"See other examples, always from the normal schools. This is the drawing made by the pupils from nature, of their own observations through the microscope; here a section of a plant, a fragment of a leaf or of a flower, there an insect dissected and prepared in separate bits in advance and mounted on pins, all ready for the lesson in things to be given in the annex school."

From an article by F. Buisson, entitled "A corner in the exposition at Antwerp," published in the "Revue Pédagogique," August, 1885.

V.—LANGUAGE.

THE COMPOSITION PROBLEM.

BY EUGENE BOUTON, ALBANY ACADEMY, (NOW PRINCIPAL NEW PALTZ NORMAL SCHOOL, N. Y.)

Our school year is divided into four terms of ten weeks each. Until recently it has been the custom to require once in three weeks, of each boy above the lowest class, a composition of not less than three or four pages of letter paper. I suppose the work has been done as well and as willingly as in similar institutions elsewhere. But there has hitherto been the annoyance resulting from the traditional antipathy to the task. I had long been convinced that one extended essay, treating a subject fully and written with especial care, is of more value in developing the ability to compose than a number of short ones. Consulting a number of the boys, I found that they were willing to try the plan, and it was decided to require but one composition a term. It was understood, however, that the composition must be of sufficient length and excellence to make up for the extra time allowed.

Each boy was allowed to choose his own subject, although the right to reject any unsatisfactory one was reserved by the teacher. In case any boy was unable to satisfy himself in the choice, he was aided in his selection. The subjects were, however, in most cases the unaided choice of the pupils. Among them were the following: Hunting, Implements of Warfare, Amateur Photography, Clocks, Estimate of the Times and Character of Cicero, Lord Byron, Henry VIII., Chess, The Revolutionary War, Printing, A Country Ramble, Caston a Desert Isle, Caves, Base-ball, A Day with a Bicycle, The Fifteenth Century, Daniel Webster and His Contemporaries, Troublesome Insects, A Trip to the Bermudas, Nathaniel Hawthorne, Macbeth, The Two Voices, The Character of Richard III., Literature, Richard I., Oriental Poetry, The Crusades, Iron, Pleasures of the Winter Season, Modes of Warfare, The Late Civil War, Candles, Coal, Iron, Traveling, Spiders, The Darwinian Theory, Mountains, The Moors, Trees and Their Uses, West Albany Car and Locomotive Repair Shops, Inventions, Bells, Mechanism of the Human Body, Horses, Dogs, John Stark, Modes of Locomotion, Musical Instruments, Malting, National Costumes, Music, Mining, The Prosperity of the United States, History and Traditions of the Hudson, Marmion, Games Ancient and Modern, Pleasures of the Summer Season, Alfred the Great, The Sun, Life on the Prairie, Historical Novels, The Telephone.

The subjects having been chosen, each boy was required to bring for criticism his outline and the portion of his work already accomplished. It was at first intended to criticise each boy's work in detail before it was finally copied; but it was found impracticable to do so, on account of want of time and the incomplete state in which the work necessarily remained, until towards the time appointed for handing it in. No written outline was required, but each boy was asked to tell what he had done and what he intended to do. Such suggestions were made and such encouragement was given as occasion seemed to demand. Such boys as had shown artistic talent and inclinations were encouraged to illustrate their compositions with such plates or pictures as they chose to prepare.

The results of the experiment have been much more gratifying than I expected. With scarcely an exception, the compositions were ready at the time appointed. Apparently without exception, every boy tried to make his treatment thorough and complete. They were expected to write articles of such length as to occupy twenty minutes or half an hour in reading. Some exceeded that limit, while others fell short. The majority occupied from fifteen to twenty-five pages of congress letter paper. Every boy seemed to have done his best to make his work as beautiful as he could. In several instances, boys, who scarcely ever before were known to prepare a respectable paper, except under compulsion, handed in documents that were almost models of care and neatness. One boy handed in a handsomely bound volume, about three-eighths of an inch thick, having an ornamental title-page and containing numerous plates illustrating the progress of the game of chess. Another bound his own work, which contained a beautiful figure of a spider drawn from nature, and about half a dozen plates illustrating minutely the anatomy and habits of the spider. Another composition contained about half a dozen large drawings illustrating the history and legends of the Hudson. There were none of them ordinary schoolboy attempts, but earnest, careful pictures, almost worthy of professionals. Still others attempted less artistic, but not less sincere, illustrations of the subjects described. Many of the compositions were exquisitely copied, and were almost faultless in punctuation and in penmanship. Of course, many of them contained numerous mistakes in punctuation, and this was especially the case with the younger boys, who have not yet had special training in the minutiae of the art. They were asked to stitch the sheets together, but many fastened them with ribbons in such artistic fashion as to add considerably to their appearance, without interfering with the convenience of the reader. The most satisfactory feature of the whole matter was, that almost every boy did considerably better than even his hopeful teacher supposed he could. And the Principal and Board of Trustees, who examined the work, were even more outspoken in their praise than was the instructor.

Such was the method, and such were the results. I have told my experience in the hope that it may be of service to others. I trust that I shall not be disappointed. This is certainly the nearest approach to a composition millennium that I myself have ever made, or that has ever come under my observation, although I do not wish to be understood as claiming to have beaten the world. I shall not be grieved to learn that such results are common elsewhere. I hope, if such is the case, the fortunate instructors will give us the benefit of their experience. I have an impression that the good results are due largely to the importance attached to thoroughness and originality of treatment, freedom of choice in subjects, definite instructions as to form, encouragement to boldness in developing the outline, length of time allowed for preparation, persistent previous training in habits of neatness and correctness in written work, and, perhaps, not least of all, to printed suggestions which were intended to be comprehensible and practical,

and which were in convenient form for preservation. At any rate, I think the boys have learned more about composing by this single exercise, than they would have learned in the entire year by the more frequent and shorter exercises.

VI.—BOTANY.

SUGGESTIONS FOR BOTANIZING.

FOR WRITTEN WORK.

The following form for plant analysis is given by Geo. G. Groff, A.M., M.D., in his "Book of Plant Descriptions." The outline should be modified to suit the age and ability of the pupil:

No.....	Date.....
ROOT. Kind.....	shape.....
STEM. Class.....	kind..... shape.....
surface.....	character..... direction.....
Duration.....	branches..... height.....
LEAF. Arrangement.....	vernation..... form.....
.....base.....	apex..... margins.....
.....surfaces.....	venation..... texture.....
.....color.....	duration..... compound.....
.....petiole.....	stipules.....
INFLORESCENCE. Class.....	mode..... regularity.....
.....symmetry.....	No. parts..... perfectness.....
.....completeness.....	bracts.....
peduncle.....	receptacle.....
CALYX. Color.....	shape..... cohesion..... relations.....
.....insertion.....	No. sepals..... shape of.....
.....æstivation.....	duration.....
COROLLA. Color.....	shape..... cohesion.....
insertion.....	No. petals..... shape of.....
æstivation.....	duration.....
STAMENS. No.....	cohesion..... insertion.....
length.....	position.....
ANTHERS. Attachment.....	shape..... aspect.....
dehiscence.....	No. cells..... pollen.....
PISTILS. No.....	length..... cohesion.....
style.....	stigma.....
OVARY. Insertion.....	shape..... No. cells.....
placentation.....	ovules.....
FRUIT. Kind.....	dehiscence..... ripens.....
SEEDS. No.....	shape..... surface..... embryo.....
REMARKS.....	

ORDER.

GENUS.

SPECIES.

NAME.	{	Scientific.....	
		Common.....	
Habitat.....		Locality.....	

PICTURE MAKING.

Very interesting and profitable work for training the observation, may be provided by furnishing each pupil with a box of cheap water-colors (they can be bought for three cents per box), or pieces of colored crayon, and letting them draw and color their specimens.

PHYSIOLOGY.

Describe the teeth. State how they are preserved, and what makes them decay early. State difference between teeth and bones. Give rules of Hygiene of the bones. (Examples.) Describe the anatomy of the muscular system. Give a description of the anatomy of the circulatory organs. Give an account of the physiology of the digestive organs. State hygienic rules regarding the respiratory organs.

NOTE.—In making these statements, confine yourself to the essentials. Lead-pencil sketches in the margin, illustrating the subject matter, will greatly enhance the value of the work.

NATURAL PHILOSOPHY.

Describe the common lifting pump and the force pump. State the underlying principles. Describe the hydrostatic or hydraulic press principles. Describe an artesian well; principles. Define: Matter, Inertia, Elasticity, Energy, Gravitation. Describe the formation of primary and secondary rainbows. State why, of all the colors, *red* is always at the top in a primary bow. Where is it in a secondary bow, and why? Show why the image of an object is as far behind the mirror as the object is in front. Describe the human ear, and state the functions of its principal parts. Give one important law of acoustics. Describe an organ pipe; also a string instrument, and show how sound is produced.

NOTE.—Lead-pencil sketches in the text, illustrating the subject matter, will greatly enhance the value of the work.

APPENDIX C.

REPLIES ON "DRAWING" AND "MAKING."

The following extracts from replies have been made, to show something of the various ways in which drawing and "making" are used:—

DRAWING.

State Normal School, Bridgewater, Mass.

"In Botany, plants and their parts viewed under the microscope."

"In Zoölogy and Physiology, animals and their parts and views seen under the microscope."

Normal School, Columbus, Ohio.

"In normal school to show methods for teaching, and to suggest aids that young teacher may use in her school work."

State Normal School, Geneseo, N. Y.

"The senior class who are teaching are quite dependent on it in giving public lessons in a variety of subjects."

D. C. Murphy, Normal School, Lock Haven, Pa.

"I use it largely in teaching History, representing campaigns, forts, cities, etc."

Lawrence, Mass.

"Drawing is used considerably in connection with the study of arithmetic and geography, in arithmetic in the study of roots, also lumber measurements, width of streams of water, slope of roofs, measurement of angles and triangles."

Philadelphia, Pa.

"Drawing is used in the first four grades as a means of understanding arithmetic."

"The pupils draw wagons, shoes, triangles, bottles, baskets, apples, etc."

They place the contents on bottles, baskets, cars, and then do the examples in figures.

C. Wyman, Port Huron, Mich.

"The pupils draw from dictation, copy, and object. They draw all the simple forms and designs in these forms, borders, etc., outline figures of children and objects from copy, and also draw simple objects in the schoolroom from nature."

"In number, I use drawings of small objects for counting as a step between the object and figure. In learning words, all that can be are represented by drawings, and as I encourage the pupils to copy these, they rapidly improve. In reading, a picture is always made to illustrate the story, the pupils being far more deeply interested in a picture that they see made, than in one in the book."

"Object lessons are always finished by having the pupils draw from the object. In language I often develop a thought or story by drawing and having pupils copy—directing the questions and answers to the point we wish to impress. Occasionally I allow pupils to draw what they please and describe it or tell a story about it."

"I commence geography by having each draw a plan of schoolroom, then of premises, vicinity, and so on. We constantly impress the fundamental surfaces and solids, and encourage original designs in the forms."

Stafford Springs, Conn.

"Representations of position of objects on table preparatory to geography."

"Representations of moulding board and contents."

"Working drawings made to scale for senior class telescope."

MAKING.

State Normal School, Bridgewater, Mass.

"They are required to make the geometrical forms from clay and cardboard. The forms of geographical features are made in clay."

"The forms for the demonstrations of propositions in solid geometry are made from cardboard and wire."

Columbus, Ohio.

"The simple geometric solids and common objects, vases, etc., of clay, paper, cardboard, wood, tin, soap, maps and plans in relief, clay, sand or moulding earth."

Normal School, Dayton, Ohio.

"We do allow some preparatory work with Kindergarten material, to lead up to the work of drawing with excellent result. The children soon show considerable taste and knowledge in invention."

State Normal School, Emporia, Kansas.

"Objects made in clay, wood, soap, starch, plaster of Paris, and putty."

State Normal School, Framingham, Mass.

"In the practice school, the children mould in clay to illustrate geometrical forms. They make colored drawings, or work in worsteds, geometrical forms to illustrate their color lessons."

Training School, Lawrence, Mass.

"During vacation we shall have more models made particularly to illustrate house building."

"Solids have been made from clay and surfaces, by cutting paper—particularly units for designing. In geography, relief maps have been made of clay and putty."

Erie, Pa.

"Forms in sand, clay, splints, blocks, pebbles, etc."

Oakland, Cal.

"Models of solids with wood, folded paper, toothpicks, and soaked peas; sand relief maps, wood sawed maps."

Omaha, Neb.

"We have had a great many pieces of ingenious whittling and a great deal of wood carving in relief. We have also had some work in clay and some stone cutting."

Port Huron, Mich.

"With the blocks we make houses, fences, steps, gates, stove, chair, bench, etc. all represented afterward in drawings."

Racine High School, Wis.

"In physics, pupils construct apparatus from drawings prepared by themselves."

St. Paul, Minn.

"In all grades where working drawings have been made, objects to correspond, with them have been required as home work."

Miss J. C. Locke, St. Louis, Mo.

"Each and all of the models illustrating the 'American Text-Books of Art Education,' Nos. 1 to 9 inclusive, designs in clay and reproductions of casts in clay."

Stafford Springs, Conn.

"Metric measures of wood and weights of sheet lead."

"Senior class have constructed 4 in. non-achromatic telescope, tripod wood stand, tube of paper, lenses mounted in turned wood cells."

Walter S. Perry, Supervisor of Drawing, Worcester, Mass.

"Many teachers in this city make use of drawing, and the means through which it is developed, as aids in teaching other studies."

"A few instances are as follows:—

1. 'The free arm movement, acquired in drawing, is made the basis for free execution in writing.'
 2. 'All letters and parts of letters in writing, so far as possible, are based on the geometric forms used in drawing.'
 3. 'Pupils draw upon the blackboard and upon slates outlines of simple objects which are used in teaching number. Young children will make some kind of a drawing of almost any object we show them. For instance, hold a daisy before a class, and the children will quickly make one, three, five, or any number.'
 4. 'Pictures are made for the children to study when teaching language.'
 5. 'Drawings showing surfaces, one or more views of solids, are made by pupils in connection with problems in arithmetic.'
 6. 'Pupils cut patterns out of paper, and make cylinders, prisms, cones, pyramids, etc. These models are made much use of in the study of mensuration.'
(A few examples accompany this note.)
 7. 'Children mould in clay and sand when beginning the study of geography, while map drawing is extensively practiced in all grades. Maps are made of the floor of the school building, of the yard, street, a section of the city, county, State, etc.'
 8. 'Drawings to illustrate objects, implements of warfare, etc., are made as the names are met with in the study of language, history, spelling, etc.'
 9. 'The study of drawing enables pupils to grasp and to hold the general forms of words, objects and maps, as it would be quite impossible otherwise to do.'
- 'A teacher reports that she could not train her pupils to beat triple time well. Finally she told them to make a good right-angled triangle in the air and thus gained her point.'
- The following is a list of the objects "made" by pupils, which are reported in the replies:—

APPENDIX D.

OBJECTS REPORTED IN THE REPLIES.

TYPE FORMS.

Geometric Solid Forms, Spheres, Cubes, Cylinders, Square Prisms, Oblong Blocks, Cone, Square Pyramid, Hexagonal Prisms, Double Cone, Square Plinths, Circular Plinths, Single Cross, Forms of Crystals, Geometric Surface Forms.

NATURAL FORMS.

Apples, Lemons, Pears, Pumpkins, Vegetables, Animals, Birds.

ARITHMETIC.

Metric Measures, Weights.

GEOGRAPHY.

Geographical Moulds, Continents, Icebergs, Relief Maps.

HOUSEHOLD OBJECTS.

Bells, Bench, Books, Chair, Flower-pots, Forks, Frames, Funnels, Knives, Lamp-shades, Match-safes, Padlocks, Pen-wipers, Pin-cushions, Pocket-books, Smoothing-irons, Spools, Spoons, Stove, Vases.

TOOLS.

Hammers, Hatchets, Hoes, Jack planes, Mallets, Rakes, Saws.

MACHINERY.

Hollow cylinder, Flanged cylinder, Bolts, Pulleys, Washers.

PHYSICAL APPARATUS.

Inclined plane, Lever, Scales, Electroscope, Galvanometer, Helio-stat, 4 in. non-achromatic telescope, tripod wood stand, tube of paper lenses, mounted.

BUILDING.

Houses, Brackets, Chimneys, Fences, Gates, Steps, Pieces of wood for joining.

APPENDIX E.

USE OF DRAWING IN NATURAL HISTORY.

I. EMPLOYED BY THE TEACHER.

1. Superior intelligibility of information addressed to the eye.
 - (1) Seeing is *easy*-picturing and abstraction *difficult*.
 - (2) Hence the system of "object-teaching" (nothing new) and the "Kindergarten."
 - (3) Peculiar adaptability of natural science for "object-teaching." Especially to the *young* and the *uncultured*.
2. Illustration of natural objects.
 - (1) Extemporaneously on the blackboard.
 - From real objects or the mental images of them.
 - From representations of them.
 - From ideals.
 - Geological sections—maps—diagrams.
 - (2) Beforehand on the blackboard.
 - (3) On slides for the lantern.
 - Recent extensive use of the lantern.
 - Drawing directly on the glass or photographs.
 - (4) By means of camera lucida under microscope.
 - Diatoms—Desunds—minute structures.
 - Photographs of minute objects.
3. Schematic exhibits.
 - (1) Synoptical or tabular presentations (botany—analytical chemistry.)
 - (2) Implied notions of proportion, symmetry, subordination.
 - (3) Condensation of contents of text-book, etc.
 - Importance of grasping the method and subordination of parts.
 - (4) Synoptical exhibit of a course of lectures.
 - (5) Tabular presentation of a geological description.
 - (6) Grouping of many particulars (species or genera).
 - (7) Immense utility of such methods to the student.
4. As an Investigator.
 - (1) To record graphically observations made.
 - (2) Method of the engineer and land-surveyor.

- (3) Contour and isothermal lines.
- (4) Rough sketches of the scientific observer.
- (5) Finished representation.
- (6) Almost every naturalist a draughtsman.
- 5. As a discipline of his own imagination.
 - (1) Dependence of discovery and invention on imagination.
 - (2) Imagination in geometry—astronomy—algebra—geology.

II. EMPLOYED BY THE PUPIL.

- 1. Reproducing the pictures made by others.
 - (1) This alone directs attention to every feature.
 - (2) Copying illustrations from textbooks, etc.
 - (3) Preparing charts, diagrams, etc., for the teacher.
- 2. Recording original observations.
 - (1) As in the study of a fossil, or flower, or structures.
 - (2) Tabulating, analyzing, classifying.
- 3. The mere draughtsman insensibly grows into a naturalist.
Examples.

PROCEEDINGS
AND
ADDRESSES
OF THE
INDUSTRIAL DEPARTMENT.

INDUSTRIAL DEPARTMENT.

TOPEKA, MUSIC HALL, July 14, 1886, 2.30 P. M.

Prof. J. M. Ordway, of Tulane University, called the meeting to order. The secretary, Mr. W. F. M. Goss, being absent, Prof. W. C. Latta, of Indiana, was appointed secretary *pro tem*.

In the absence of Prof. McAllister, Superintendent of the public schools of Philadelphia, who was to deliver an address on the "Progress of Industrial Education," Profs. Morrison and Sickel, of Philadelphia, were asked for statements concerning the work and progress of industrial education in their city. They reported the experiment, which was begun a year ago, a fair success. The work is directed by teachers employed especially for that purpose; there are now thirty-one teachers of sewing employed.

Pres. Fairchild stated that he believed the only industrial educational work in Kansas was done at the State Agricultural College. There, besides the work in farming and gardening required of students in the second and third years of the course, there are shops for 150 students in carpentry, a printing office for 50 or more, a telegraph office for 35, sewing rooms for 75, kitchen and dairy for 25. In all of these, careful supervision leads to distinct and useful training. The student is required to give one hour a day to this training, and may give more under favorable circumstances. All young men must give one term to carpentry, and all young women must give one term to sewing.

Prof. Ordway, of New Orleans, reported that manual training in carpentry had been successfully introduced into the preparatory department of Tulane University. They began with the higher class of people, and the work was popular from the first. The cause of industrial education is gaining ground in the South. The industrial work done in the public schools of the South is mostly directed by special teachers engaged for the purpose.

Prof. Hoss, of Baker University, asked if agricultural education leads toward the farm. The underlying question was whether the love of the beautiful and cleanly does not lead from the plain industry to the various professions and callings of more delicate work—in other words, whether the boy does not turn to a calling that will allow the white collar and clean cuffs, rather than the sweaty shirt of the farmer.

President Fairchild replied, showing that agricultural education does lead toward the farm and secures better farming. He read statistics concerning the students and graduates of the State Agricultural Colleges of Kansas and Michigan, and cited cases where seeming desertion from the ranks of the industrial classes resulted in benefiting these classes by giving them strong champions in the press, at the bar, and in the legislative halls.

Prof. Walters, of Manhattan, endorsed President Fairchild's argument, and said there was no necessity of a boy being a boor because he was a farmer. The study of the natural sciences draws toward outdoor life, toward the farm, the garden, the woods, and the herd.

An inquiry among the teachers of industrial schools resulted in a general endorsement of a statement offered to the effect that a moderate amount of manual labor regularly required of students is conducive to better work in the classrooms.

TOPEKA, MUSIC HALL, July 15, 1886, 2.30 P. M.

Prof. J. M. Ordway in the chair. Upon motion the President appointed a nominating committee of three to report names for officers of the industrial department for the ensuing year.

Dr. George F. Magoun, President of Iowa College, was then introduced, who read an address upon "Manual Education from the other Side."

The discussion following was spirited.

Dr. E. E. White, of Cincinnati, did not think that the present system of manual instruction would produce the desired result. The seven representative tools are not the things the graduates of our high schools are likely to use in their life work. The world needs tool-workers, but most of all, it needs thinkers and men of character.

Dr. Stille, of St. Louis, thought that the results of industrial education in the United States were all that could be expected, and that the influence of manual labor in the formation of character was one of the main points in its favor. Europe is ahead of us in industrial education; in the line of trade schools as well as in higher, or polytechnic, work. I believe in the so-called "Russian Plan" of teaching the use of tools.

Prof. Walters, of Manhattan, spoke of industrial education in Switzerland. A close study of experiments made by other nations might give us valuable hints in our search for the golden mean. All so-called trade schools of that country, as the school for watch-makers at St. Imier; the school for wood-carvers at Brienz; and the school for weavers at Trogen, started with the idea of teaching the respective trades during the main part of the day, and giving the most necessary theoretical instruction in the off hours. The agricultural school of Hofwyl, founded in 1819,—the

first agricultural school established—was likewise intended to be a mere manual labor school. But all of these schools have long since reduced the hours of work and increased the time given to study. On the other hand the many *Gewerbeschulen*, the federal *Polytechnicum* at Zurich, and the *Ecole Industrielle* at Lausanne, schools that were organized without considering the actual work in the shop as of much importance, have gradually introduced manual labor into their varied curricula. We must find means to educate both hand and mind.

The nominating committee then presented their report, and in accordance with their recommendation the following officers were elected for the ensuing year:—

President, J. M. Ordway, of Louisiana.

Vice-President, J. A. Wickersham, of Indiana.

Secretary, J. D. Walters, of Kansas.

MANUAL EDUCATION FROM THE OTHER SIDE.

BY GEORGE F. MAGOUN, PRESIDENT IOWA COLLEGE.

There is a certain amount of curiosity, here and elsewhere, as to what is meant by "the other side" in this address. The phrase imports neither mystery nor mischief. So far from indicating any phase of partisanship on this question, or on any aspect of it, it simply indicates the coming into a discussion,—which here must be, like this body, "national,"—of views formed in opposition to some partisanship upon this side and upon the other, and in conscious repugnance to any and all. Let me speak here in all frankness and sincerity as one most of his life connected with classical colleges. Consider me free from all bias, therefore, if I say anything in favor of a style of education different from theirs. And why not also if I do justice to what is good in theirs? Appreciating both, from New England antecedents and more than forty years of Western work, why should I not accept cheerfully the requirement that both sides and all sides shall be duly appreciated? It is plain as can be that many who have helped on the discussion here and elsewhere have in fact—however earnest they may have been—had no axes to grind; my only wish is that it may be equally plain that he to whom you happen just now to listen cannot possibly have one.

Whether what is to follow is to be "song" or "sermon," and in either case what the moral is of the one, or the movement of the other, in due time will be seen. As both sermon and song have been largely resorted to by partisans on this question, perhaps it will be neither.

The present stage of the discussion of manual education discloses some things as settled, some as on the way to settlement and likely to reach it soon, and some as incapable of settlement at present, probably for a considerable period in the future.

1. It is settled that the new artisan and artistic avocations require real education as much as the old learned and literary professions. This is not specially brought to a conclusion in this country; but in all civilized countries, and therefore in this, among them. In the arts of life knack and the rule of thumb and unreasoning expertness have had their day; in the professions mere language has dominated as it never can again. When science comes, it abolishes neither, but changes their place to a lower one. This is to say, that on the somewhat exclusively physi-

cal side and on the somewhat exclusively intellectual side alike, as man has learned a little he has hastened to put it into expression and use,—to communicate it to others and to apply it to things. But a vast and sudden increase of learning and ideas must needs change the relations of both manual and verbal expression. How much more they are yet to be changed, no one is wise enough to foresee. For no one can know what men are yet to learn or what our descendants are yet to be trained to do, on either side and in every possible direction.

2. It is settled that training for entirely different ends cannot all be of the same kind throughout. Where the differentiation in education which has been going on is to stop, who can foretell? We shall round the tale of all possible styles of human culture when we shall have run through all the possibilities of man, and all the ends for which he can think and act. Not before. The old style had for its main end, truth; the new, well-being, practical utility, largely material good; which is true as to both the useful arts and the fine, for training in fine art recognizes the utility of beauty. Both styles aim to develop faculty, to secure discipline of mind,—else they could not alike come under the common term education. Perhaps there is yet another phase, at least, the great attainment of the future, which shall have for its steady and all-pervading aim,—right, as distinct from truth, utility, and beauty,—discipline in *the* good as other and more than good—recognizing the truth, utility, and beauty of moral excellence as taking precedence of all else. Shall we discuss and discuss this, and wait till the theological and Biblical millennium to see it take its kingly place? Meantime, as the ends named cannot be confounded, even after Plato, so the great styles of training for them cannot be. Such a differentiation of educations once made is fixed. The technical brethren say correctly that Greek and Latin, and grammar and rhetoric give no mastery of the new nineteenth century industries, or of the faculties especially employed in them; and the classical brethren urge justly that neither art nor artisanship cultivates the peculiar powers that have produced great books and are exercised thereby. We cannot criss-cross opposing methods, or in the detail, displace one by another.

3. Clearly both sides have a right to adopt the maxim tersely phrased by one of the masters of manual training: "We must put the whole boy to school." He who cannot accept this may be in his own groove a practical educator, but cannot be a philosophical one. Each style of training does its part, and this only, towards a whole greater than itself, and has its general influence,—wholesome if not one-sided and partisan—upon the general development. Otherwise we could not have, to take only the nearest examples, and from the former occupants of this chair, such teachers as the Harvard classical graduate who is principal of the noble training school at St. Louis, or the classical gold medalist of two successive

years in my own college in Iowa, who is at the head of its fellow at Chicago. If one part of the boy Woodward had not been put to school in the old way at Cambridge (1856-60) and one part of the boy Belfield in the same old way at Davenport (1854-58) we should not have had "the whole" man in either case to train their pupils of 1886 in the new way, Nothing more idle could have been said for classical education than this. that like art, as Ruskin and Cousin hold, its very uselessness for the purposes of life is its excellence. It was never, since it began to be, without some reference to after uses of the faculties drilled by it. The arguments for every kind of training are good at one point, and the objections good at another. On the other hand, all arguments which seem to claim that the regimen which improves any part of the boy can take the place, ideally, of putting the whole boy at school, if we can, or will answer as well practically, are as inconclusive and absurd as Hamilton's sweeping denial of any intellectual benefit from mathematics. We must concede the training of some faculties that have nothing to do with the hand. That "man without his hand would be but a brute" is, as to sense and truth on a par with this, that his hand alone makes man human. From the Latin name of one hand we get *dexterity*, word and thing, but not soul. It cannot be shown that nerve and muscle, the sole and necessary means of reaching the wide, wide world without us, are anything more at all, or can ever be the media of intercourse with the far wider world within us.

4. Quite as clearly, different modes of intellectual drill are best for their own special ends. Let us be fair. How much manual training can do intellectually, is not yet to be said, nor how well it can do it, for no large number of the best educating minds have yet given themselves to it. Let the champions of the hand do with their might what their hand findeth to do. The fine results they have secured after small and short trial suggest that perhaps future results will be greater and richer than the most enthusiastic and sanguine predict; but chiefly in their own special line. The knowledge and achievement possible to the hand, may run higher as well as lower than we now imagine. In the sacred things of faith, the Evangelists report to us what "their hands had handled of the Word of Life." For a larger proportion of children in elementary schools than could have been expected, this form of training—blending the exercise of other senses with those of tactual and muscular sensation—proves a help along certain lines of intellectual development. Other forms are indispensable in other directions. Let that which should be utilitarian, in the ordinary sense, or in the bread and butter sense, be thoroughly so. Let every other sort be thoroughly itself. The earthly destiny, at least of different minds, lies in different directions. *Suum cuique*. We cannot drive all the energies of souls into either physics or metaphysics. It would be a badly constructed world if we could. It

would not run well, with natures endowed for and inclined to one part only of the whole of knowledge, being, and action, and averse to all the rest. To be sure, knowledge of all kinds is less and less possible to the individual; but discipline, culture, training on many sides (I will not assert on all), is more and more so. Universal scholarship was never anything but an ideal; it is now not even that. So the great future educational danger is mere specialism. But it is an unavoidable one. For the intelligence and skill required for specialties are growing greater every day. They demand a man's whole force and time. Nothing, then, can diversify and broaden and liberalize the mental life of specialists, but such complete technical fitness for their specialties as to give them in come and leisure enough to make of themselves something more and better. In other words, in putting the whole boy to school you must recognize the value of other types of development than that which he needs for success in his own line in life, and liberally supplement the special technologies you give him with as much of the other things that make a whole man as you wisely can. Nor less is this needful for the specialist on the literary side. What has borne the name of a liberal education has often been illiberal to all but itself. Some of our intellectual knives are to be sharpened as iron sharpeneth iron; some on material of harder texture.

The temptation is on all sides to claim illogically and unfairly that what proves successful in one direction and groove of culture would be the same in any and every other. Every such assertion—argument, I cannot in candor call it—recoils upon the side for which it is made. It collides with those distributions of capacity and aptitude which our Maker has appointed to us severally. The most absurd proposition in favor of exclusive classical drill in academy and college has been this, that it alone supremely disciplined judgment, cultivated taste, and awakened thought. It does this by its great records of idea and character, wrought and finished by the chief masters in the use of words,—of which let no disparagement be uttered here or elsewhere! A little analysis, however, explodes the exclusive proposition of the classicist. Thought, indeed, can breed thought; but (in the first genesis and in the last test of it as to truth) is nothing save as related to things in the widest sense of the word, concrete, the proper sense. And neither books nor arts, the intellectual or the material, can monopolize this. So those comparisons as to beauty, to which we lend the name taste, lie between things *through thoughts*, and all discipline of judgment follows the same course. Word definitions lead to definitions of things. Education cannot be confined to abstractions. It were a gross intellectual cruelty to teach of visible objects and never show the objects themselves to the pupils, if it can be done. In the advanced subjects it cannot; neither political revolutions, nor the epochs of

palæontology, nor the history of philosophical systems, nor the struggles of admired genius, nor the formation of great characters that planted Christianity in the world's convictions, nor extended processes of evolution, can be brought on in the classroom and exhibited. Description and definition must answer. But after all, the inestimable service rendered to a Gladstone or a Sumner by critical study of the choicest works of man, and of that work of God in him which makes him capable of them, there is still a good deal left for a critical study of the other works of God, without man and below him. Here and there one has so extraordinary a gift of phantasy that he needs little object teaching; he can see it all "with the mind's eye," as we say, and "carry it in his head," as Jacob Straun, the wealthy Illinois farmer, carried all his accounts with hundreds of workmen, tenants, supply traders, etc., in his, without record of them. But the masses never can do this, or learn at all without the help of sense as to sensible things, in that impressible period when the maxim of Rousseau is truest,—“the best explanation of a thing is the thing itself.”

The most absurd proposition, again, in favor of predominant, if not exclusive, technical drill, is, that tools, as a prime agency of civilization, surpass all other training agencies, every way; which signifies that—as civilization is the aggregate product of intellect, feeling, and will, the implements for producing it by hand alone quicken and fertilize the inner powers lying behind, that is that we are really and in sober fact, civilized by the producing implements rather than by the powers that produce. Does civilization really begin and continue in the hand or in the head controlling it? But a more obvious, easy answer to this vast assertion is, that what we bring under the great comprehensive title of literature has its tools, as well as the arts, its methods and appliances of analysis as well as the physical sciences. The advocate of education by literature can adopt the statement of the advocate of education by the practical arts—with another inflection—“its highest textbooks *are tools*, and how to use them most intelligently is the test of scholarship.” It is not possible for the new education to supplant the old in its own sphere, or for the old to fence out the new from the sphere that of natural right belongs to it, say by showing that humanity has no further use, in either case, for that best exercise of the respectively related faculties which each secures. Classicists ought to favor industrial training that they may be relieved from trying to make Greek scholars of boys whom God made for machinists and toolsmen, and technologists ought to favor literary courses that they may escape the hopeless effort of making machinists out of boys whom God made for Greek scholars,—though for neither alone.

5. One of the things well settled is that we are to have a great multitude of schools for instruction in the arts, of various grades and peculiarities. Those who object to anything more, to reaching the children of the

people more widely, concede that this, at least, is coming. The necessities of diverse manufacturing industries, the trend of production and trade, the pressure of domestic commerce, the competition of foreign skilled labor, trained in such schools abroad, all make this inevitable. We cannot now hold our own among civilized and productive nations without it. I happened to be in London in 1881, when the Royal Commissioners on Technical Instruction were ordered by Parliament and appointed by the Queen. These gentlemen were commissioned "to inquire into the Instruction of the Industrial Classes of certain Foreign Countries on technical and other subjects for the purpose of comparison with that of the corresponding classes in this country (Great Britain); and into the influence of such instruction on manufacturing and other industries at home and abroad." To augment the amount, perfection, and profit of British industries was the object, and every argument used in Parliament, in the public journals, and in conversation, was applicable to this country. On being kindly placed by Mr. Russell Lowell, our Minister, in communication with the Vice-President of the Council for National Education, I was assured by Mr. Mundella that American educators who wished at any time to accompany the Royal Commissioners would be welcome, and all the results would be promptly communicated to Gen. Eaton of the Bureau at Washington. A year before the St. Louis School had been opened; three years later the Chicago and Toledo Schools went into operation, and Tulane University at New Orleans came into existence; and last year the Public Manual Training School of Philadelphia. Every one can see that departments in colleges and universities linking the education of the hand with established courses of higher instruction are multiplying, and that no departments are to multiply faster, though independent institutions for the same end may outstrip them. Municipalities lying near to great stores of raw material and of coal will ere-long be obliged to multiply these; the enterprise of business men and manufacturers in such marts of produce as Kansas City, Omaha, and Minneapolis, will emulate the example of those of Chicago; the division of labor going on so fast, and the distribution of specific trades, each with its own technique, will originate other schools, like and unlike, in smaller centres. We shall have towns like Chemnitz in Saxony, with a half a million of dollars of property in Higher Technical, Foremen's, Builders', Machine, Drawing, Weaving, Hosiery, Agricultural, Tailors', and "Fortbildung" Schools—the work of 100,000 persons within the city connected with that of twice the number without, and all other types of education on a par with that which prepares for the university. In all these schools for direct instruction in the arts the principle must be differentiation, to a degree which is not possible in general education, lower or higher, though this must be less and less independent of it. Even our high schools can-

not now be run in one mould. The useful art institutes of various regions, and even of the same region, must needs differ. Generous men, too, are quite as likely to follow the example of Purdue and Case and Rose as those of the great names whose munificence has made the older colleges powerful, and each to have a technological scheme of his own which his wealth shall carry out.

6. We already see that the multiplication of these special schools and departments affects largely general education. I look for no sudden revolution. The effect will be to amplify and liberalize the well-established and well-proven, rather than to overturn it. The head will still be above the hand. It is noticed that there is really slight distinction between a machine and a hand tool; the greater is an enlargement of the less. Often a machine bristles with clusters of tools. But there is a wide difference between the ignorant feeder of the machine and the skilled manipulator of the tool. It is too late in the day—let me say at the risk of repetition—for any one part of the educating process to monopolize the place of the whole. Other and newer parts are yet to acquire status and exert their influence. Each and all must help the whole. But it is not feasible now to devise and set up an institute to promote the making of better commodities and not turn out from it improved thinkers and better men. For the skilled workers in wood and iron are men, and in adding skill, and the finer thought which makes so large a part of it, you have added just so much to the man. Of more than one business association it will yet be written: "Their purpose in founding the school was industrial, not educational reform"; "they builded better than they knew." The conservatives, who care only to bring out what they deem the "higher" human faculties, must shut off the better use of what they call the "lower," if they would escape reforms from beneath. It is affirmed of the athletic exercises at Yale that "the sight of men attending to their physical development and being according to laws and rules, acts upon the college world to encourage regularity of life, and obedience to authority." I once succeeded in introducing into college open air military drill (peace man, as I am) and, speedily, deportment in recitation and chapel improved, docility increased, the meaning of law and authority was better understood. I am pretty certain no warlike spirit was engendered. I am absolutely sure these good results were worth all the cost of the manual of arms (without arms for the most part). Mr. Blake well says that, "Nature looks after the mechanic's thoroughness and takes him in hand to produce a splendid instance of that half-mental, half-moral excellence called precision." "A hand-workman is driven to precision by the very nature of his occupation." I often wish I could drill a class in psychology or logic, or ethics for a while in that way. The kindergarten has made object lessons in metaphysics and linguistics in history and political

science, possible and intelligible. Before its day what is mistakenly called illustration (and is exemplification) was less common in the higher studies than now. The real primary revolution we are seeing is in labor rather than in education. That has been divorced from this more than this from that. Labor has begun to go to school, and therefore the school cannot be just what it was. It asks of education now: What shall my future be? This new affiliation dignifies labor in the special schools as in venerable universities thought and genius have been dignified of old. The outer universe is brought to honor when the study of it takes place beside that of the universe within, and benefits reeiprocally that which honors it. Getting so much nearer as teachers and pupils to a neglected domain of reality we get nearer to all reality—would I could say that the outer domain, more than the inner one has done, suggests the resplendent Reality of Realities behind them both, that the lower cosmos to which our eyes are opening teaches us of Him what the microcosm fails to teach. The very basis of some studies is unquestionably better laid in the light of man's relations to the material world—e. g., that of political economy and social science,—not tethered to documents as history is, but so largely connected with our physical activities as to be in danger of neglecting what is intellectual and moral. This general influence in coming from the side opposite to the bookish side of education, is touching and shaping both matter and method.

7. It seems to be thoroughly well settled that it is manual education only *as education* which is under discussion, and not as preparation for money making vocations. The latter is a part of the general subject of manual training, but not of this particular branch of it. Each opponent of it lays his blows on applied technics or trade and handicraft training at the charge of the state, and each champion—save those on "the other side"—elaborates the distinction between this and instruction in the general elements. Would it not save time and breath and paper and ink to agree, all round, that this distinction is now established, and may be silently assumed? The great trades may have as much right to their specific lines of training being done at public expense, out of our taxation, as the great professions; but this does not prove such a right for either. Between educators and managers of productive industry the question of this or that trade discipline as related to previous elementary discipline remains to be discussed, but not between educators themselves. The principles common to all pursuits that add form and use to raw matter, the qualities of materials employed in common in so many of the arts, and the fundamental forms of tools employed in all can surely be discriminated from the advanced processes followed up, after these are mastered, in an apprenticeship school. And the disclaimer from the educators of hand and brain jointly must be accepted by their opponents: "Our object

is to make men, not mechanics," they say. "Industrial results will follow, but they will take care of themselves." The most one-sided classicist or metaphysician ought to be thankful if they do! and his own life be so made better "worth living." Why should there be misrepresentation or misunderstanding here, where mutual justice is so obvious and so easy? Even Mr. Huxley says: "The preparatory education of the handicraftsman ought to have nothing of what is ordinarily understood by technical about it." Turning schools into shops, or emptying shops into schools is one thing; attaching laboratories to schools is quite another. Let us be fair. The question is not: What gives the readiest and best command of all human powers, related and unrelated to matter, for all, with their special aptitudes, to every extent, but to a certain extent. For one's aptitudes after a while subordinate all the common measures of faculty, common to him and all others, I mean to themselves. The man becomes the mechanic, the author, the teacher, the statesman, or what not. But before all this, what can book education or hand education do severally and jointly for him? is the question.

8. In all this, woman, it is settled, is to share equitably, is she not, with man? Whether in co-education, joint education, or separate, other things must decide. She has a pair of hands, with the senses and intellectual gifts necessary to use and skill. That is enough for the equity. For some pursuits she has vastly more industrial and artistic dexterity than man. For object lesson and kindergarten work she has largely more talent and tact. But the necessity of using hands and eyes in carrying on civilization and securing a livelihood,—more difficult to her in a complex and crowded society as well as more difficult to man,—carries with it the necessity of her learning to use them, and of being taught the best way. It is of no use to mourn that the angel of the house must hereafter live in, so many instances, a dustily and noisily industrial age; all we can do is to look after the equities in it, to which she is entitled. Fortunately, the higher education of woman came in before the higher education of the hand, and it is settled that the latter cannot now neglect the former. But it still remains that in girls' schools for manual training—(where there cannot be co-education, or even joint education, in certain methods), the distinct aptitudes and needs of woman be equitably respected, and her training shaped to these. And we must have the greater grace her teaching always gives.

Perhaps no more points than these, if so many, can be propounded as fairly, or in good measure, settled. If they have been impartially stated, and received, we need not shrink from going on a little farther, with others not settled, and certain considerations that bear upon them.

(a) Will any of you, gentlemen of this Division, object to my saying that in respect to influence upon health the balance is not yet struck?

There are the well certified facts of improved physique in the laboratories for founding, forging, machine making, turning, tool-making, carpentry, etc. And there are the liabilities to peculiar nervous strain connected with so much muscular action and observation of material objects. But *all* our over-activities disclose tendencies towards insane conditions of mind. No one knows enough yet to assert that these connected with the arts do more than others. The common antidote for them all is to distribute the activities and the pressure among more persons and to lighten by diversifying those of each individual. Better manual training and better intellectual culture with it for the young workman will prove his safety. Transitions from nerve to nerve, muscle to muscle, faculty to faculty, are, rather than idleness, as a rule, wholesome. Any way, we must educate for every new art that arises. We cannot help ourselves in this hurricane of civilization. If an art is unhealthy, more must engage in it, and for fewer hours per day, or improve the processes so as to relieve exposure. It is precisely in the school that remedies needed here must be applied. Let the schools, then, see to it. I am reluctant to introduce a mere opinion or expectation in place of a fact or a reason, but I am confident that in any grade of schools in which tool practice is introduced, its healthfulness as a gymnastic will outweigh all liabilities to the contrary.

(b) You will readily consent to my adding that the question, how early in a child's school life this should be introduced is not yet determined. Some insist that this shall be done before manual education shall be admitted at all. But it is commonly easier to see clearly that a place must be made for some improvement than to see what that place shall be. So is it here. It is almost a quarter of a century since the veteran George B. Emerson sent the inquiry to the fourth meeting of this Association, held at Chicago:—"Ought not the knowledge of the mechanical powers and their important applications and principles to be made known as early as possible to every child?" The question has never yet been answered in the negative, and now it cannot be. That early time is the very time for mastering all the elements that are to be of lifelong necessity, *together*. Prove that any are not of such necessity, and their acquisition may be postponed till a later period. But not otherwise. There is a flexibility of mental endowment which is far more precious than that of muscle and finger which goes along with it and is the outward correlate, perhaps sign of it. Better than to complain of parrot acquisitions and memorizing without thought, is to forestall them. Do not claim too much and too sweepingly for the use of mechanical tools as stimulating mind, i. e., all mind—one boy is not another, nor each child as every other—but show, as you easily can, that an elementary acquaintance with the typical and common forms of the handling of matter by implements, belongs among the primary branches, next after kindergarten practice,

and not among those of the year before graduation from college. Alike to ornamental and to useful art this applies, and what is more to that fine blending of them made so illustrious in the past by the famous workers in iron. It must do so, from the first, if we are to discover and fitly develop and utilize for society the choicest aptitudes of each generation and discover the choicest in each child to himself. You might leave a great inventive and constructive genius like that of George H. Corliss, uninterested in engines till he comes to man's estate, as he was : sometime he will find out what God has made him for,—perhaps too late for so splendid a career as that of the great master of his art at Providence, but our age imperatively needs a countless multitude of those who are not geniuses, who must have spur and cheer at the entrances to the arts before their young force is set in some other direction where nothing awaits them but waste of time and faculty and failure in life. That the whole spirit, soul, and body God gives a child should be wrought to profit of all sorts from earliest days was the primitive "Teaching of the Apostles" of Education. Primary development of the mind by the hand and the hand by the mind is but this teaching "writ large."

(c) And shall we not agree that for us the question of manual training has become one of adjustment? First, to secure equity between those elements of instruction which have always favored classical courses exclusively and led our pupils into them, if they took any course at all, and the new elements that point to active pursuits. Here the best way of adjustment in detail must be found by experts. I doubt as to any one best way, however, being thoroughly persuaded from much experience in other curricula that the adjustment of the elements everywhere must be flexible to local wants and resources, and to developments of industry and scientific progress. Second, adjustment between the common aptitudes and wants of all pupils and the special ones of some. It being conceded that we must have the advanced applications of science taught, that in a land more than one-fifth of whose school children are to live by labor, the schools must not spoil them for it, nor spoil others for other pursuits, and that we cannot have the advanced teaching drill without the primary instruction, the great problem is: What modicum of this last shall be given in elementary schools? It is not a month since Sir Lyon Playfair said in the House of Commons, of the elementary schools of England, "The pressure for technical instruction is becoming irresistible." How many months will it be ere in some one of our states, in accordance with our non-national systems, a superintendent of Public Instruction shall say the same? I assume, then, that manual training is to go into our public primary schools, the unsettled question being where? when? how? Institutes in vacation instead would answer no better the wide, uneasy want that is felt, than summer teachers' institutes would meet the want of normal work all the school year round.

And why not into all our public schools? The economical reasons for it are increasing; but the disciplinary ones are what they always have been, for no man can successfully deny that valuable developments of mind and character are peculiar to skilled labor. But even the economical value of the results depends largely—many will say mostly—upon what it achieves for mind as discipline. Mr. Huxley told the Working Men's Club of London that, "success in any kind of practical life is not dependent solely, or indeed chiefly, upon knowledge." Wherever our skilled laborers and managers of large establishments of skilled laborers are to be fitted for the astoundingly busy future that is before them, this is not to be disregarded. Out of what schools, then, must come most of these, if not out of our public schools? Does public policy, or equity, to say nothing of the discontent already bred in dangerous days and ways among workmen who cannot afford their children the tuition of private schools of science and art, allow the common want of hand practice to be ignored? Hear the question of the Deputy Superintendent of San Francisco: "Is it proper that a public school, an institution belonging to the entire people, should prepare over sixty per cent. of its students to play gentleman?" Overlook the sharp edge of the query, if you please, but not its purport. The tasks men have in new and forming states make them appreciate labor and despise a life of idle ease. What shall conform to the general wants of the community if a common school does not? What equity toward the masses until the beginnings of skilled labor are brought into it? All over the land the workshop and the factory must spread, especially all over these great Interior States, lying so near both to the coal measures and the iron mines,—i. e., to the metal which gives man chief command of the earth, and to the fuel which gives him chief command of the metal. Political economy cannot omit any education which relates to the order and prosperity of the state; I share in the deepest wonder any of you feel that it has done so as long as it has. The common school can harm no literary man by practicing him in the use of the common tools; he will need it all his life, as he will need the physical vigor gained in his school days. Indeed, a talent for mechanical work is more common than a talent for literary work; and there are more children that cannot master a respectable amount of orthography than there are who cannot acquire a respectable amount of tool practice; more that can learn mechanical drawing decently well, than there are who can learn penmanship decently well! I have for years marvelled that all primary instruction does not put the drawing first in point of time. Of this part of the land at least, in the heart of whose glorious breadth of natural resources and unimagined wealth of material we meet, the engineers and the wood-and-iron workers and builders shall never have that said of them which the greatest of Prime Ministers said of those who are famous in England, "These

men had no mechanics' institutes, no libraries, no classes, no examinations to cheer them on their way."

In arguing thus, for elementary manual education in all elementary schools, I am simply arguing for what is best for all children, not for what is profitable or necessary for a few who have exceptional gifts for industrial pursuits. Mr. Huxley says that "the most important object of all educational schemes is to catch these exceptional people, and turn them to account for the good of society." Most earnestly I demur. Mr. Huxley confounds the object of some educational schemes with those of all; he confounds the special aim of special schools with the common aim of common schools. For the development of extraordinary genius to the "top of its bent," the common school was never invented, but for that of something far commoner, common sense. The mechanical geniuses, like the literary ones, are rare and exceptional, whether Mr. Gatton's estimate, 1 in 4000 attains distinction, 1 in 1,000,000 exhibits genius, is exact or not. We are not to forget that mechanics' sons do not all inherit a talent for mechanics, nor authors' sons for authorship, nor sons of professional men for professional life. Some of the latter are born machinists, inventors, builders; some of the former are born doctors, jurists, or preachers. The public education at the start can give only a start in general training; but it should be truly and fairly general, and without the manual fundamentals it is not. As to practice then, in with high school laboratories and primary ones respectively, I judge that in the latter it should be required, in the former optional, giving due play to the bent of individual natures. And with existing tendencies, among professional men for example, to send their children to private schools, and their ability, denied to working men, to send them to costly schools of technology—if their bent lies that way—and with the proof in this land that marked talent of any kind will make its way, I am sure that the great genius for industries which God gives to any generation will now be developed, if we supply the proper start in the common school for all. Most critical, it seems to me, of all the things that are to be done for them, is the selection of their masters in practice, of whom I am prompted to say, that they should be chosen for industrial proficiency and the natural, God-given genius for teaching, whatever book-qualifications they may lack. Better in the school laboratory the man who can keenly stir the practical bent of pupils and show incisively and analytically what they are to do, than one who fails of this in the most perfect rhetoric and manner. And as in other branches, the finest capacity of instruction will be needed in the most elementary work. Here again the equities for woman in industry claim place. I cannot resist the impression that with her, more than with man, the creed is, that the head leads the hand, a fundamental faith which is needed to save the teaching guild from being

blown about by "every wind of" didactics, as new phases of training arise hereafter.

What you have heard has proved a sermon, perhaps prolix and dull. I wish I could for a moment turn it into a song of this glorious vocation of ours, Brother Educators. Let me say with diffidence that nothing has been advanced to-day which is not the fruit of accumulating conviction through nearly twenty-five years. From my own stand-point on "the other side," I have tried always to deal fairly with the question before us, and do a little to extend the meaning of culture downward and that of labor upward. How high and deep and broad is Education! else could we have room to prepare the young for so complex a modern life as ours, or differ so as to the best means of doing it? How wide-armed a calling is ours, gathering in from every side materials for its uses, going the grand round of human endowment to select what it will enrich and bless, making all interests of society in some measure its debtors, all achievements of intellect and character in some sense its outcome, never adequately rewarded, for it never can be, never appreciated in any fair degree till we are done with it, never realizing its own elastic ideal, but by what it makes of man, giving him his first dim vision of what he yet may be, setting his face rightly towards his present, which is framed here in the material, and toward his future, which leaves it behind for the greater glory of the spiritual, human, and divine; its narrow scope of to-day gives as little conception of its breadth, depth, and height in the to-morrow of history, as the coming ages and the garnered civilizations shall unite to make the true teacher worthy of his great name.

PROCEEDINGS

AND

ADDRESSES

OF THE

Elementary and Kindergarten

DEPARTMENTS.

ELEMENTARY AND KINDERGARTEN DEPARTMENTS.

FIRST SESSION.

TOPEKA, WEDNESDAY AFTERNOON, July 14, 1886.

At 2.30 P. M., a joint meeting of the Departments of Elementary Schools and of Kindergarten Instruction was called to order at the Methodist church by Hon. J. W. Holcombe, of Indiana, president of the Elementary Department. At the request of the presidents of the two departments, Miss M. W. Sutherland, secretary of the Elementary Department, acted as secretary for both departments.

Mrs. T. A. B. Dunning, of Wisconsin, who was to have presented a paper upon "Froebel's Principles in the Family and in the Kindergarten," was absent. Mr. William N. Hailmann, of Indiana, therefore proceeded to a forcible discussion of "Froebel's Principles in Primary School Work," speaking, however, sufficiently of the preceding subject to introduce his own clear and logical paper.

At the conclusion of his address, the general discussion was opened by Mr. I. N. Mitchell, of Michigan.

Miss Jennie L. Jones, of Minnesota, and Miss Mary C. McCulloch, of Missouri, who were appointed to continue the discussion, being absent, the discussion became general.

Mr. Bell, of Indiana, questioned the first speaker as to whether there was not a time at which peremptory authority must be used. Mr. Hailmann answered by saying that it was easy to say "Thou shalt" and "Thou shalt not," but to produce spontaneous motive was more difficult, but more important. The speaker had been humbled to the point of "Thou shalt" by an inadequate notion of child nature. He never whipped nowadays, but had used the rod for want of knowledge of child nature. He protested against saying that that which we are compelled to do because we don't know a better way, is the best way.

Miss Curtiss, of the Kansas City Schools, spoke of the harmony between kindergarten and elementary work, and the necessity of improving the latter by the spirit of the former.

Mr. Smith, of Nebraska, said that he had felt great interest in the paper. He stated that the question of expense was always started, but that when he asked his Board of Directors for a place to work and then materials for work, his request was cheerfully granted.

Miss Jenks, of Kansas, was anxious to supplement materials furnished, and had gained many new ideas from the exhibit of kindergarten work.

Mrs. Alston, of New Jersey, questioned as to the manner of pupils making a First Reader.

The substance of Mr. Hailmann's answer is included in his paper.

Mr. McCrea, of Indiana, questioned as to the effect of selecting work of *some* children for publication. He spoke, also, of the worth of such literature as compared with that of standard authors.

Mr. Hailmann said that where the proper spirit exists there is no jealousy. The compositions were not models of *adult* work, but were immensely better than some supplementary readers.

B. G. Roots, of Illinois, spoke a word of encouragement to those anxious to do good work. Miss Kuhlmahl, of Kansas, being called upon to tell something of her work, gave a few observations as to the general progress of good work.

Mrs. Hilliker, of Kansas, spoke of the wonderful effect of Miss Kuhlmahl's work upon the State of Kansas, and the national benefits conferred by Mr. and Mrs. Hailmann.

Mr. T. O. Hutchinson, of Oregon, asked *how* to bring kindergarten work into graded schools. Mr. Hailmann could not give a prescription, but gave some very profitable suggestions. The chief one was that a study was to be made of all circumstances,—Boards, people, pupils, etc., and the best to be made out of such circumstances. We cannot always have the methods of kindergarten work, but ought always to have the principles.

The discussion closed at five o'clock. Mr. C. C. Davidson, of Ohio, moved that a committee of three on nomination of officers for Elementary Department be appointed. Motion carried, and the Chair appointed as committee, Mr. C. C. Davidson of Ohio, Mr. H. S. Jones, of Pennsylvania, and Mr. L. Messick of Illinois. The elementary section then adjourned to meet at 2.30 P. M. on Thursday.

A brief session of the Kindergarten Department was then held to consider the advisability of holding, in the future, joint meetings of the two sections, and for the election of officers for Kindergarten Department. After a brief discussion it was moved and carried that next year, if possible, arrangements be made for joint meetings of the Kindergarten and Elementary Departments.

On motion of Mr. Klemm, of Ohio, the present officers of the Kindergarten Department were unanimously re-elected. The Kindergarten Department then adjourned.

SECOND SESSION.

TOPEKA, THURSDAY AFTERNOON, July 15, 1886.

The meeting was called to order by President J. W. Holcombe, at 2.40 P. M. He proceeded at once to call for the papers upon the programme. The papers were to constitute a Symposium:—A Survey of Common School Education.

The first paper, entitled, *Historical Sketch, with Exposition of Aims as Formulated in Different Countries*, was by Mr. W. H. Bartholomew, of Kentucky.

Before the presentation of the second paper, at Miss Warr's request, the President stated that she had undertaken the preparation of the paper upon the subject at a late date as a substitute for another had not, therefore, been able to collect all the statistics that and she desired for her purpose. Subject: *Necessary External Conditions*. By Miss Vina L. Warr, of Iowa.

Third. *Course of Study: Proper Limits and Divisions*; Supt. H. M. James of Nebraska.

Fourth. *Course of Study: Order of Subjects with Reference to Laws of Growth*. Miss Mary B. Phillips, of Illinois.

Fifth. *Principles of Method and Common Errors in Teaching*. Miss Agnes I. Rounds, of New Hampshire.

Sixth. *Special Conditions in Country Schools, with Suggestions for Improvement*. By Mr. George F. Felts and Mr. John C. Macpherson, of Indiana.

Seventh. *Summary: Aims, Limitations, Subject Matter, Methods, Results*. By Hon. LeRoy D. Brown, of Ohio.

Eighth. *General Discussion*. Opened by Miss Ida Joe Brooks, of Arkansas.

The discussion was continued by Mr. H. G. Larimer, of Kansas, who had not seen any of the papers, and could, therefore, consider only a few of the points which he had noticed as the speakers proceeded. He thought that much that had been said in regard to the employment of kindergarten methods could be applied only to graded schools. The same objection held against manual training in schools. Teachers qualified for such work could not be obtained. The great mass of pupils have but one teacher to prepare them for life through common school instruction. The speaker protested against cast-iron grading, stating that to shut out a boy from a higher grade when he was prepared in grammar, arithmetic, etc., because he could not tell the capital of Indiana, or answer some kindred question, was absolutely wrong. He was much pleased with what had been said concerning the beautifying of schoolhouse and grounds. The school should be made like a cheerful home. These were simply thoughts that had been suggested as he sat listening.

Mr. McCosh, of Kansas, thought that a school building should not exceed two stories in height. Two storied buildings were preferred to one, as the passing from one floor to another gave physical training to pupils of sedentary habits.

Mr. Roots, of Illinois, understood that the reference had been to country schools.

Miss Curtiss, of Missouri, thought that the height of a school building was a very important consideration.

Mrs. Hard, of Ohio, wondered if there were no woman here to begin a crusade against buildings of three or more stories. The poor physical condition of woman is due to constant climbing. The very pupils sent to the higher rooms are the ones most likely to be injured by climbing. Nothing having a bearing upon the development of the highest type of womanhood should be neglected.

Mr. Lane, of Illinois, indorsed all the sentiments in regard to improvement of buildings. He was in sympathy with principles uttered requiring perfect models in every respect. It is important that teachers be gathered together in order that they may learn these things. There is no reason why pupils should be gathered from attractive homes to spend five hours each day in unattractive schools. Work should be illustrative so far as it is possible to make it. The foundation is laid in kindergarten instruction. Children should be led into paths of science in its simplest forms. There are many new books to aid in this work. Kindergarten and manual training are both of great importance.

Mr. T. O. Hutchinson, of Oregon, said that schoolhouses ought to be made so as not to injure health; but more girls are injured by not taking exercise for fear of being called tom-boys than by illy-constructed schoolhouses. Then again, pupils are required to be too quiet. However, the difference in individuals should be considered in school arrangements.

Owing to the lateness of the hour the discussion was then closed.

President Holcombe returned thanks to the Department of Elementary Instruction, for the honor conferred in his election to the presidency of the department; to the accomplished Vice-President, Mr. Klemm, and to the Secretary, for assistance in carrying on the work of the department; but especially to the ladies and gentlemen for their carefully prepared papers and their work in coming so far to deliver them. He returned thanks to the audience for their presence and polite attention.

The Committee on Nominations reported as follows:

For President — W. H. Bartholomew, of Kentucky.

For Vice-President — Elizabeth Baumgardner, of Illinois.

For Secretary — Margaret W. Sutherland, of Ohio.

Report adopted.

The department then adjourned.

MARGARET W. SUTHERLAND, Secretary.

APPLICATION OF FROEBEL'S EDUCATIONAL PRINCIPLES TO THE PRIMARY SCHOOL.

[SYNOPSIS OF THE ADDRESS OF W. N. HAILMANN.]

For the purposes of this sketch, Froebel's Educational Principles are classed under three heads: the *religious*, *ethical*, and *physio-psychical*.

The first of these, the *religious* principle, concerns the ultimate aim of education, which it finds in unity and wholeness of life. In accordance with this principle, education has to do at every step with the whole child in all his relations, and in all these relations is to lead him to conscious peace. As an *individual*, the young human being is to be set towards full accord in all the phases of his being; his knowings, feelings, willings, and doings,—thought, motive, and conduct must lie on the same plane, and tend towards the same unity which to thought is truth, to motive principle, and to conduct righteousness. *Socially* his life should be attuned to the strong, sweet voice of love; he should sympathize with his surroundings in all that concerns true welfare; his deepest yearnings should be to allay suffering, to relieve from sin, to make smooth the paths of peace, these should become to him joy, glory, wealth—more precious than all else that goes by these names. He should be at one with his *race*, placing himself in knowledge and action on the basis of highest achievements, in tendency in the current of highest ideals. In *nature* and the *universe* he should learn to read the Creator's laws; their contemplation should teach him active obedience, and thus secure to him the inner freedom by which he may approximate the Father's perfection.

The second of these, the *ethical* principle, concerns the proximate end of educational activity which lies in character, in the persistent drift of being towards goodness and thoroughness, towards perfection. Whatever the educator says or does, plans or executes, his example, his adjustments of surroundings, his courses of study and practice, his lessons and tasks, must look towards the formation and establishment of character. All educational activities are good in the measure in which they do this, and there is nothing else that can give them a claim for consideration. Every educational activity, worthy of the name, must be, even in its minutest details, an organic part of a larger process that runs through the pupil's entire being, having its roots far down in the depths of feeling, pushing its branches under the quickening influence of sunny thought into the mobile regions of conduct where it may yield a rich harvest of golden

deeds. All educational activity that sees no end beyond itself is doomed to die and to burden the pupil's life with dust and ashes: here it burrows in the feelings and is stifled to death in their rich soil; here it soars aloft heedlessly, and lingers out of life on the barren heights of frosty thought; here it is wafted over the arid plains of moral precept or exhales a scanty life in the pitfalls of aimless busy-work.

The third or *physio-psychical* principle concerns the immediate essential feature of the human being under education, which it finds in growth and development. At every step it regards and respects the spontaneity of growth, and leads it through the medium of the trustful obedience of faith to the conscious masterful obedience of freedom. Nothing less will do: the spontaneity of growth furnishes the springs of action and life; trustful obedience secures the life sustaining strength that comes from practice and habit; and in freedom alone man reaches true humanity. An education that stops at spontaneity of growth makes a despot; another that stops at trustful obedience makes a slave; only conscious masterful obedience to a law whose terms are known and understood makes free; only this can free us from the disgraceful shackles of suicidal appetite, snatch us from the inglorious ease of self-seeking prudence, and lift us into the pure heaven of principle which is the only worthy abode of man.

The *methods* of an education based on these principles are necessarily *physio-psychological*, i. e., obeying the recognized laws of physical and psychical development, so far as the pupil is concerned; and *analytico-synthetical*, so far as the subjects of instruction are concerned. At every point the pupil's physical and psychical power, the stage of development he may have reached and the influence and bearing of whatever we may propose to do upon these things, are to be considered. The child who can lift only one pound is not to be asked to lift two, nor is his strength to be frittered away in efforts that lie far beneath his capacity; the little learner whose interest is still bound up in external variety should not be repelled, by having presented to him a surfeit of considerations of inner unity, nor should he be held on the lower planes of interest with childish tricks and gewgaws, when he has commenced to feel at home on the higher plane; the pupil whose innocent heart is open to consideration of pleasure alone, should not be prematurely forced into considerations of grim-visaged prudence, nor have suspicions aroused against the behests of stern principle, nor should his heart be closed to the voice of duty by too long continued efforts to gild even the nearest duties with some artificial pleasure.

The presentation of subjects of instruction, as a whole and in their various departments and parts, should be analytic-synthetical. They should come to him on the side of feeling and through thought be led to his will. Feeling analyzes, will synthesizes, and thought mediates be-

tween the two. Feeling gets and learns; thought holds and makes ready; will gives and does. The school must cease to pay almost exclusive attention to the first half of these activities, and must begin to look upon the second half as at least of equal value, making them getters, learners, and holders for the sake of making them givers and doers. It should do this in every detail of its work in the various subjects of instruction. Thus in arithmetic, not only in its study as a whole should the child first and analytically find numbers, their properties, and mutual relations, and then learn to use this knowledge in and for life from the lower commercial applications to its higher applications in scientific research and invention; but each new fact or principle that comes to him should at once be suitably applied in all convenient and feasible ways of synthetic activity. Indeed, each new subject should come to the child as an outcome of analytic activity. At first, all subjects are more or less blended in the universal interest of earliest school life, and successively gain prominence and independence as analytic processes successively develop the need for special instruction in certain directions; and, again, each new subject so found, should, by a kind of larger synthesis, aid and lift all other subjects and life as a whole, at every step.

The course of study, therefore, demands a concentric arrangement of all subjects and of all material of instruction. At the center stands the child with free, full, all-sided outlook. Nothing within the reach of his power and interest is excluded. All subjects are open to him:—number, form, and size, object and phenomena of nature and of art, the concerns of man and of society are open to him; all these things he may observe, test by experiment, contemplate and use; limitations lie not in these subjects but only in his power. The fact that he cannot divide seven-ninths by three-fourths does not rob him of the pleasure he may find in finding one-half of three-fourths; his inability to determine the square of three hundred and seventeen does not keep him from the control of the square of two or of three; his failure to appreciate meteorological laws does not exclude him from the observation of wind and weather; his lack of interest in the wars of the Spanish Succession does not keep him from a lively concern in the history of his village or the story of Paul Revere.

The course of study should be managed so that at every point it may lift and help the learner towards the accomplishment of his life purpose, which is productive of creative activity. Even where a subsequent division of labor on economic grounds, assigns to one or the other human being mediatory activities, these will always derive their dignity from their bearing on the creative work of mankind. Every subject of instruction, in its beginnings and its progress, should, therefore, be closely related to modifying, arranging, adapting activities in which the child may exer-

cise his power as a maker of things, and learn to feel the mastery of spirit over matter. In this lies the value of manual training, practiced in the kindergarten and in the La Porte primary schools, and proposed by Froebel as an essential element of all school education,—a manual training distinct from industrial training, inasmuch as it looks to art more than to artisanship, and looks for its criteria not in the external product but in the internal development of the child. Neglect of this causes so much of our educational work to “end in smoke,” subjecting the pupil to the mortification of finding himself when he enters life rather hampered than helped by what the school gave him. The influence of the college and university, too, is much reduced in scope and value because of its disregard of the creative soul of man. Too often it prepares only for a life of refined leisure which it dignifies with the name of culture.

Again, while the course of study is to permit and foster growth, it should not overlook the necessity of guidance and watchful care. Not unfrequently the notion that education should be a growth or rather a development from within outward, has induced teachers to look upon guidance and guardianship as improper interferences with the requirements of free development. This is a pernicious error; free growth is by no means inconsistent with guidance and watchful care; on the contrary, these are needed to keep growth free, to keep it from going astray, to secure for it the best direction, to shield it from weedy parasites and enervating water-shoots, to protect it from the inroads of noxious insects and fungi. The kindergarten has suffered much from errors in this direction on the part of ill-advised persons who seem to look upon it as an institution run by little children; and certain primary schools who take pride in “new departures” “on the kindergarten plan” frequently are remarkable only for extraordinary lack of order, method, and healthy development.

Froebel's educational principles, far from being adverse to method in the course of study, rather look upon method as an important proximate end of the work in all its phases. If the child's senses are to be cultivated, this should be done in such a way as to lead him to a methodical use of his senses; teaching him to see, hear, etc., in an orderly manner, and to interpret in an orderly manner in language what he may have observed. If the child is to become acquainted with his immediate surroundings, he is to do this in a methodical way, proceeding regularly from the near to the remote, from the whole to the parts, from the outer to the inner, from their nature to their uses, etc. If the child is to study arithmetic, he should again follow the lead of some rational method,—examining numbers in their elements and relationships, in their properties and laws, and using them for the various purposes of school and life in strictly methodical ways. Nothing can be more methodical than Froe-

bel's suggestions on the studies of language and science, which in his teaching are ever ready, orderly helpers, and never arrogantly set themselves up as disorderly, illegitimate ultimates.

Lastly, in all subjects of instruction of a course of study based on these principles, the things involved should precede the words in which these are symbolized or described; and this is equally true in expression and impression. Ideas of number, of form, of the qualities of objects, etc., must first come to the child from things. A variety of numbers should be counted, a variety of forms seen and handled, qualities of objects observed, experienced, found by experiment, etc.; and the word used during all this time, simply to fix and arrange the thought-images that come from these things, to mediate between the child's outer and inner world, to spiritualize—as it were—for the child, his material experience. Similarly, the thought-images of the child should, at first, be expressed chiefly in things. Arithmetical problems should be solved with the help of things, form-ideas expressed with the help of clay, paper, or other plastic or mobile material, the qualities of objects used for suitable purposes; and the word should come in to interpret or confirm the child's purpose, to impress upon his handiwork the pupil's spiritual seal. Only on such a basis can the word become to the child a living word, only thus can the child's language in school and out of it grow and develop in significance and value with the child's mental growth and development; only thus can it become the right hand of thought in the creative life of man.

[In the Harrison School building, a typical exhibit of work tending in these directions from the La Porte Schools had been displayed. The speaker referred to this, by way of illustration so far as form-work is concerned.]

When the child comes to school (at the age of six), he is already quite familiar with the fundamental forms,—cube, cylinder, and sphere. He may not know them by these names, nor be able to describe them; but he knows the forms quite well and distinguishes them with little trouble. A first step would be to test the character of this knowledge. With plastic clay the pupil makes these forms,—“square” hat-boxes, square meat-blocks, paper-weights, marbles, balls, rollers, pots, kettles, birds' nests, etc. This will lead him to observe more closely the character of the surfaces, the curvature or straightness of the edges, the formation and sharpness of the corners, and other features. All this time, corresponding thought-images become fuller and more accurate, as well as purer and more distinct, and are more and more truly symbolized in proper terms of language.

Very soon the square and circle stand out with sufficient clearness in the child's mind to serve as points of issue for a second step. The pupil

fashions square and circular tiles, and adorns these with simple impressions around the border, in order to get hold of the outline. At first these tiles are made of any suitable size, since the form and outline are the essentials; later on they are made of given dimensions—four, two, three, and five inches square or diameter. The surfaces of these are analyzed with the help of lines—diameters, diagonals, etc.,—tending to the centre or passing through it. The resulting surfaces are measured, engraved, painted, described,—the ideas and their expressions by hand and word, growing simultaneously.

Alternating with these exercises are others with tinted square papers. These are folded in the direction of diagonals and diameters and cut into parts. These parts are then described, measured, re-arranged symmetrically and fastened on paper in these new arrangements. Splints, long paper strips, about an inch wide properly folded, and slats are used to bring, express, and apply ideas of linear relations; and dots, lentil seeds, etc., fix ideas of point relations. This course in the primary department concludes with the study of the cube with the help of clay. The surface of the cube is analyzed in variety of ways; and at last a few prominent crystalline forms, such as octahedron, tetrahedron, and rhombohedron, are developed from it.

During all this time and from the very beginning, drawing goes hand in hand with these exercises. Here, too, the square and circle form the basis of the work. All drawing sheets are of these shapes—four to six inches in diameter. For exercises in automatism, ordinary manila wrapping paper is used, properly cut and folded, so that each exercise may yield to the pupil a symmetrical and mathematically perfect whole. For experimental and inventive drawing, the square sheets are ruled in a network of smaller squares. Throughout, the drawing of the primary school is to be managed not for its own sake as in the ordinary Manual or "System," but wholly as the hand-maid of mental growth. [This course was fully illustrated in the exhibit.]

The number work is to be done at first wholly with the help of things. These things, however, should be of the simplest kind,—colored cubes, cylinders, and balls, splints and seeds. Complicated things such as toy flags, rakes, spades, axes, and the like, draw the child's attention away from number to the details of the object as such, and hinder the growth of number notions. The stringing of beads, such as Mrs. Hailmann's Second Gift Beads, furnishes the best start. The simple differences of shape and the clear color contrasts, furnish excellent means for distinct operations in all kinds of analysis and synthesis. Subsequently a number of the spherical beads strung on a wire or shoe string are placed permanently at the back of the child's desk, as a mobile and adjustable "numeral frame," which helps the child in all arithmetical operations—

inwardly and outwardly. Splints, seeds, and the form-work already sketched, offer rich opportunities for rich and fruitful application of ideas gained.

In the study of things and phenomena, collections and descriptions and systematic observation are recommended as suitable starting points. Collections of the simplest things—of different kinds of paper, wood, cotton, woolen and silk goods, buttons, seeds, spices, etc., are systematically made and mounted by the children, on suitable cards, offering rich opportunities for a vast amount of general information in lively, natural conversation, *not* question-and-answer games. In all these exercises it is essential that the child should be led to method in his work. In the study of simple objects, the pupil first furnishes descriptions in clay and drawing, and—in some cases—in paper or wood, and then is led to systematic verbal descriptions, applying his senses in regular order, and subjecting the object to a series of methodical experiments.

He keeps a regular record of wind and weather, noticing the direction of the wind, the state of the atmosphere, the character of the clouds, observing the position and motions of the sun, moon, and stars, studying the flow and pressure of water, the pressure of the air, simple electric and magnetic phenomena, the growth of plants from “seed to harvest,” the development of the frog, of the silk-moth, etc.; and furnishing in all cases clear, concise, and methodical oral and written accounts of the work.

It will be seen what an important part language plays in this, and how readily special, methodical language exercises will branch out from this work. From collections of things, etc., it is but a short step to the collection of the names of things, names of qualities, of actions, etc., where writing and reading serve a truly practical purpose. In the records of observations, of current events, the same is the case. Conversations, descriptions, accounts of events, are reproduced orally and fixed in writing. Soon the child will learn to take an interest in the language forms as such, and will learn to form words from these elements, to build sentences with given material and in accordance with given plans, to analyze words into their component sounds and to classify these, etc.

An important phase of education, unfortunately much neglected, is the culture and methodical training of social insight and social virtues. This may be done by a systematic attention to current events in the school and home, in the village, the city, and country; the keeping of records; the discovery of the causes and consequences of certain events, etc.,—all leading to History and Political Geography, as the study of things and phenomena leads to Natural History and Physical Geography. The work by groups of children at the La Porte group-tables, reveals to the children the value and desirability of common effort, both in the conception and

execution of enterprises —lying beyond the powers of one individual. The regular appointment of committees of helpers in various directions of the school-work, has a similar tendency and establishes a healthy *esprit de corps*. The establishment of school-gardens by the children, however limited may be the facilities, has an excellent effect in similar directions. The joint and continuous decoration of the room with reference to the seasons, the character of the work in hand, or looking towards certain festivals is of incalculable value, and imparts a new zest to all that may be done at other times. At La Porte there are five festivals: the fall (or harvest) festival in October, the Christmas festival, the patriotic festival in February, the spring (or flower) festival in April, and the closing festival in June.

Much remains to be done in all these directions. The shortcomings of our own education and habits as teachers, the short-sighted views and tendencies of sluggish and worldly-minded communities, the limitations and hinderances thrown in the way of the school by a narrow partisan spirit in politics and religion, are appalling impediments in the way of progress; but modest striving will in due time overcome them all.

SYMPOSIUM: A SURVEY OF COMMON SCHOOL EDUCATION.

I.—HISTORICAL SKETCH, WITH EXPOSITION OF AIMS AS FORMULATED IN DIFFERENT COUNTRIES.

BY W. H. BARTHOLOMEW, LOUISVILLE, KENTUCKY.

The writer of this paper cheerfully responds to the call of the President of the Elementary Section of the National Association, and also respectfully submits the data gathered together on the important subject assigned him.

It will be readily observed that the facts are given in chronological order, and that no effort is made to elaborate them. The data indicate the *bases* of the educational system of the nations herein referred to, the *purposes* had in view in constructing them, and the *relative value* of the respective systems as means of discipline or culture.

Any datum bearing upon the subject is given, inasmuch as it may aid in the proper presentation of common school education, which rests properly and legitimately on facts.

Much research has been necessary in gathering the data, but the writer will be amply repaid if what he submits will in any wise contribute to a more diligent study of the subject which has been and is of supreme importance to all civilized nations of the earth.

1. Some very important data are found among the *primitive nations of the East*. The systems of that age, if such they could be called, were administered by the hieratic classes, and the final purpose had in view was good conduct. The methods of that time simply involved the interpretation of books, and the literal memorizing of principles. There was no conception that one of the chief objects of education is discipline, or culture. The education of that age was so administered as to perpetuate class distinctions. It seems that those who administered the systems never entertained the idea that education is a universal right and a universal good.

The *Jews* practiced one form of compulsion—that is, they required that all towns should support schools. They further indicated how many pupils should be taught by one teacher. They also recognized education as a means of national regeneration.

To *Persia* belongs the distinguished honor of first introducing the State as a distinct agency in promoting education.

China, it seems, has always made scholarship the condition of obtaining places in the civil service, and in consequence education has been made subservient to examinations.

2. Education among the *Greeks* tended toward discipline or culture. The final aim was a life of contemplation. Inasmuch as the method employed was dialectic, the mode of mental activity chiefly brought into requisition was the reason.

In the Republic is seen both phases of compulsion: first, the state must provide an education suitable for the state needs; and second, the young must accept this education because the state has ordained it. For the first time the state appears distinctly and avowedly as an educator. Education was administered on the basis of caste; though in the construction of his ideal state, Plato made it possible for talent, industry, and worth to find their proper level.

3. *Roman* education, in contrast with that of the Greek, may be called practical. Rome therefore furnishes no contribution to the theory of education. Greece and Rome have furnished the world with two types of education.

4. The characteristic of the education of the Middle Ages was the domination of religious conceptions. It included the world. The training was for the life to come rather than for this life. It was therefore exclusive in its character. In this age is found the alliance of church and state and the present disposition to dispute the right of the state to educate then had its origin. Its education was literary; instruction was dogmatic and arbitrary; words were exalted over things; and learning was a process of memorizing. The spirit of free inquiry was stifled by those in authority.

5. The sixteenth century—Renaissance—gave rise to the New or Modern Education. The contest against the errors of the Middle Ages begins, and through the efforts of the reformers of that time an impulse was given to popular education, the influence of which is felt even until this day. The Physical and Natural Sciences, which had hitherto been wholly neglected, are now considered indispensable, and in consequence the observing and inquisitive powers of the children are encouraged and trained through object lessons.

Here is a reaction in favor of free inquiry. An education of a general and liberal type is suggested. Formerly it was almost exclusively ethical and religious, but now tends to become secular. The conception that education is a process of manufacture begins to give way to the conception that it is a process of growth. Every method now tends to the training of the pupil. Thus the seeds of the Reformation were sown in this age,

and they constituted the elements of strength by which Luther was enabled to do such effective work in his time. It will be discovered that this age thus furnishes the beginnings of those principles which have become so essential and attractive in all systems of popular education.

6. The origin of common schools is found in the Christian church. Christianity is a religion of beneficence. It recognizes the value of every human being as a factor, and it aims to benefit him during the whole period of his existence. It is readily perceived, therefore, that each individual must grow in grace and in knowledge, and this required universal education. The principle is thus expressed by the great Teacher: "If ye *know* these things, *happy* are ye if ye do them." This fundamental idea has never been lost sight of, and the development of it has given the world the modern school system.

7. The *Reformation* revived the principle of universal education; and the chief spirit of this age, Martin Luther, impressed it so thoroughly and permanently on the minds of the people of that time that he saw the fruitage of it. He advocated the superiority of the Church, but still insisted that it was the duty of the state to educate. His arguments on the latter point were so weighty and convincing that the civil government undertook the education of all the children of proper age within its territory. In his address to the magistrates and legislators of Germany he used the following language:—

"Each city is subject to great expense every year for the construction of roads, for fortifying its ramparts, and for buying arms and equipping soldiers. Why should it not spend an equal sum for the support of one or two schoolmasters? The prosperity of a city does not depend solely on its natural riches, on the solidity of its walls, on the elegance of its mansions, and on the abundance of arms in its arsenals; but the safety and strength of a city reside, above all, in a good education, which furnishes it with instructed, reasonable, honorable, and well-trained citizens."

After having recommended schools as institutions auxiliary to the church, he makes a resolute argument from the human point of view.

"Were there neither soul, heaven, nor hell," he says, "it would still be necessary to have schools for the sake of the affairs here below, as the history of the Greeks and Romans plainly teaches. The world has need of educated men and women, to the end that the men may govern the country properly, and that the women may properly bring up their children, care for their domestics, and direct the affairs of their households."

Through Luther's efforts a free-school system was established in Saxony, as early as 1527, and other German states followed the example, particularly those in which the Reformation became predominant. In the early part of the next century the Germans were the best educated people in Europe. After the wars which distracted the country, Germany renewed

her devotion to popular education, and in many of the states compulsory laws of attendance were passed.

8. The work of Comenius, who lived in this age, and whose valuable efforts were for a long time unknown and unappreciated, deserves especial mention. He adjusted the conception of universal education to the social conditions of his times by a gradation that underlies all modern systems of public education. His gradation included, or provided, for *infant schools, primary schools, secondary schools, and higher schools.*

The first grade of instruction is the *maternal school*, the school by the mother's knee. The mother is the first teacher. Up to the age of six the child is taught by her; he is initiated by her into those branches of knowledge which he will pursue in the primary school.

The second grade is the *elementary public school*. All the children, girls and boys, enter here at six, and leave at twelve. The characteristic of this school is that the instruction there given is in the *mother tongue*, and this is why they were called *common*. Vernacular, a term given by the Romans to the language of the people.

The third grade is represented by the *Latin school, or gymnasium*. Thither are sent the children from twelve to eighteen years of age for whom has been reserved a more complete instruction, such as one would now call secondary instruction.

To the fourth grade correspond the *academies*, that is, institutions of higher instruction, opened to young men from eighteen to twenty-four years of age.

9. Universal education is practiced in Japan. The present system was put into operation in December 13, 1880.

Provision is made for the following schools:—

The *Kindergarten* are designed to train children of either sex under school age, with a view of assisting home instruction, and of laying the foundation of school instruction.

The *Elementary* schools are those in which general education is given to children, and at which attendance is compulsory. The school age is fixed from six to fourteen years of age.

Schoolhouses are placed at convenient points in the districts. These schools are divided into three grades: *lower, intermediate, and higher*. The length of the three courses extends over eight years.

Middle schools are organized according to local conditions. Their object is to give higher instruction in the common branches of study, so as to prepare students for liberal pursuits, or for the more advanced schools.

There is only one *University* under the control of the department of education. Its object is to give instruction in the special branches of study. It consists of the four departments of law, science, medicine, and literature. The length of the course of study is four years in each de-

partment. In 1882 there were one hundred and seventy-two (172) middle schools.

Normal schools are intended to train teachers for the elementary schools. In 1882 the number of normal schools was seventy-six. These schools are divided into three grades: *lower, intermediate, and higher grades*. The length of these courses is seven and a half years.

In addition to these schools there are, as local conditions may justify, established *agricultural, commercial, industrial, and miscellaneous schools*.

The funds of the schools are supplied from the national exchequer. Local tax is, in some instances, encouraged.

10. In *France* the subject of popular education has taken a strong hold both on the government and on the people. A new law was passed in the early part of 1882, by which education for all classes was made obligatory and non-religious. The system contains provisions for *maternal, primary, and higher schools*. Normal schools are abundantly provided. Between 1877 and 1882 amounts aggregating 220,000,000 francs were set aside for school uses; from 1878 to 1886, 368,000,000 francs. Besides these, large sums have been given for the erection of school buildings. Local taxation is encouraged.

In both Japan and France, perhaps, education is too exclusive and particular. But as the systems which they have inaugurated bear fruitage, higher and nobler conceptions of the objects of education will take possession of those who have been instructed therein.

11. In *Prussia* education is compulsory as far as the elementary schools are concerned. Other schools are provided and are open to the poorer classes at a nominal tuition. The Prussians are now the best educated people in Europe. There are 33,040 elementary schools in Prussia. There are 549 high schools and 196 normal schools. Besides these there are *industrial, trade, and special schools*, all of which are within the reach of the poor.

The present educational system was not put into force until after the conquest of the country by Napoléon in 1806. The military spirit pervades the schools. The state rules its schools as strictly as it does its army. The complete supremacy over education exercised by the church is now exercised by the government. The other schools in Germany are modeled after the Prussian schools.

England has made many improvements in her elementary schools since 1876. Her system seems to comprise day schools, night schools, and training colleges. The expense for carrying on these schools is divided between the government and the people. The annual government grants in 1883 rose from £2,393,394 to £2,522,541, that is, in Great Britain and Ireland. In Scotland it rose from £372,901 to £384,042. John Knox's plan of founding schools in every parish at the cost of the kirk is still

carried out in Scotland ; that is, the kirk has much to do with the instruction of the children. Within a few years changes have been made in the management of the schools of the kingdom, and many of the best features of the American system have found a place in English schools. Popular education is taking deep root, and ere-long an excellent system of common school instruction will be fully inaugurated. As in the government, so likewise is it in the schools—an alliance between the church and the state.

Popular education is in practice in *Norway*, and attendance at school is compulsory. In the budget of 1883 the sum of £136,428 was set down for elementary instruction. Taxes are levied in every parish for the support of the school. The school age is from seven to fourteen years in towns, and from eight to fourteen in the rural districts. In carrying out the educational system, the church and state are allied.

Mexico is making commendable efforts towards the establishment of elementary schools for the education of all the children of school age within its territory. A school of Pedagogics has been established, in which males and females are trained in the new education. These trained teachers are to be placed in the elementary schools. Mexico is thus experimenting and feeling her way towards the establishment of a popular system, and it is thought by her best citizens that the time is not far distant when she will have an excellent one.

The data herein given are sufficient to show that education is receiving most earnest attention, prayerful thought, and resolute demands of the best and purest minds of all nations. Each is solving, in its own way and according to its own environments, the problem of popular education. The indications are that the benefits of universal education will soon cover the earth as the waters cover the great deep.

The following report, made at the request of the Japanese Embassy to this country in 1872, sets forth in brief the *American System of Public Schools*. The report was indorsed by the presidents of eighteen colleges, the superintendents of several states, several governors, ex-governors, senators, and others interested in the system :—

I. Education is universal. The American people maintain in every state a system of education which begins with the infant or primary school, and goes into the grammar and high schools. These are called “public schools,” and are supported chiefly by voluntary taxation, but partly by the income of funds derived from the sale of government lands, or from the gifts of individuals.

II. Public schools have been tried for more than two hundred and fifty years. Their estimate of the value of education is based upon an experience of nearly two centuries and a half, from the earliest settlement of New England, when public schools, high schools, and colleges were estab-

lished in a region which was then almost a wilderness. The general principles then recognized are still approved in the older portions of the country, and are adopted in every new state and territory which enters the Union.

III. The well-known advantages of education. It is universally conceded that a good system of education fosters virtue, truth, submission to authority, enterprise, and thrift, and thereby promotes national prosperity and power; on the other hand, that ignorance tends to laziness, poverty, vice, crime, riot, and, consequently, to national weakness.

IV. State action indispensable. Universal education cannot be secured without aid from the public authorities; or, in other words, the state, for its own protection and progress, should see that public schools are established, in which at least the rudiments of an education may be acquired by every boy and girl.

V. The schools are free, are open to all, and give moral, not sectarian, lessons. The schools thus carried on by the public for the public are free from charges of tuition; they are open to children of all classes of society; no attempt is authorized to teach in them the peculiar doctrines of any religious body, though the Bible is generally read in the schools, and the universal virtues—truth, obedience, industry, reverence, patriotism, and usefulness are constantly inculcated.

VI. Private schools are allowed and protected by law. While public schools are established everywhere, the government allows the largest liberty to private schools. Individuals, societies, and churches, are free to open schools and receive freely any who will come to them, and in the exercise of this right they are assured of the most sacred protection of the laws.

VII. Special schools for special cases. Special schools for special cases are often provided, particularly in the large towns. For example, evening schools for those who are at work by day; truant schools for unruly and irregular children; normal schools for training local teachers; high schools for advanced instruction; drawing schools for mechanics; and industrial schools for teaching the elements of useful trades.

VIII. Local responsibility under state supervision. In school matters, as in other public business, the responsibilities are distributed and brought as much as possible to the people. The Federal Government, being a union of many states, leaves to them the control of public instruction. The several states mark out, each for itself, the general principles to be followed, and exercise a general supervision over the workings of the system; subordinate districts or towns determine and carry out the details of the system.

IX. Universities and colleges essential. Institutions of the highest class, such as universities, colleges, schools of science, etc., are in a few

states maintained at the public expense; in most, they are supported by endowments under the direction of private corporations, which are exempt from taxation. Consequently, where tuition is charged, the rate is always low. They are regarded as essential to the welfare of the land, and are everywhere protected and encouraged by favorable laws and charters.

In conclusion, it is the earnest desire of the writer of this paper that the educational systems of this country may grow into greater perfection, and that those who may, from time to time, have control and direction of them may be men of wisdom and courage; so that this nation may continue in its career of happiness and prosperity.

In the preparation of this paper the writer acknowledges his indebtedness to Payne's *History of Education*, Bureau of Education, and the *Education Year Book* of 1873.

II.—NECESSARY EXTERNAL CONDITIONS: TO WHAT EXTENT ATTAINED IN THIS COUNTRY.

BY MISS VINA WARR, OF IOWA.

To the average American the financial question is one of vital importance. In business or educational circles the same ought to be true. That the public school may attain the standing for which its friends are laboring it should be placed upon an ample and secure financial basis.

That the present revenue is not adequate, a glance at the record of salaries paid teachers will convince the most skeptical.

An act of Congress of Sept. 4th, 1841, gave to certain states the sixteenth section of land in every township, also an additional 500,000 acres for internal improvements. Upon admission of future states a part of this appropriation for internal improvements was given to the school fund. The interest accruing upon this money from the sale of this land forms a part of the revenue for public schools. To this is added taxes—state, county, district, and poll, also the proceeds of estates falling to the states. Fines, forfeitures, and penalties, which the state secures in the administration of law form additional revenue. The manner of adding to these sources is optional in the several states, and varies accordingly.

Delaware includes as a part of her school fund the proceeds of all marriage and tavern licenses, also one fourth receipts of all other licenses. Georgia adds taxes on shows and exhibitions, on dealers in intoxicating liquors, and dealers in pistols, revolvers, and bowie-knives. She claims dividends from one state railroad and one half the rental of another, also the proceeds of convict hire.

In Virginia, telegraph and railroad companies are liable to be taxed for school funds. The chief revenue of the schools in Massachusetts comes from a tax voted by the people at their annual election, or at a meeting called for that purpose. Some states receive appropriations or private funds donated. The Peabody fund is a source of revenue in several southern states.

The number of structures in which this work is conducted is about 183,000. These vary in size from the isolated one-room building of the rural districts to the mass of stone and brick of the city.

Metropolitan schoolhouses range in height from one to five stories. Is this rearing of our school buildings toward heaven conducive to the health

of our pupils? To see our boys and girls climb, climb, climb, not knowing the first principles of how to climb, presents a thought well worthy of consideration.

Instead of discussing the health of our pupils, why not decide the height of our schoolhouses? The health of the next generation depends not so much on our discussion of present health, as upon our wise provisions for the future. America abounds in lands. Why will we strive to touch the heavens with towering structures?

It is an accepted law of nature that fresh air is absolutely necessary to existence. In the construction of our school buildings this important question of how to ventilate has received little thought. The windows in most cases form the only avenues for the entrance of fresh air, and the only possible exit of foul air. Fire-places, flues near the ceiling and an open skylight, even though costing some money, eventually repay the outlay in the health which they bring to occupants of sanitarily constructed rooms. That each room contains from twenty to eighty pupils answers the question why so many children suffer from colds and the serious results which follow. An examination of the average school buildings will prove that architects, builders, and patrons must be aroused to a consideration of this subject.

Too much attention is given to the unimportant appearance rather than to the necessities of the building.

The average tax-payer's eyes may glow as he gazes with admiration upon a modern school building, while the eyes of a tax-payer's child may be ruined by the same structure. The schoolroom, with its windows properly arranged, is conspicuous by its absence, while the schoolroom improperly lighted, injuring the eyes of pupils and teachers, may be found in every schoolhouse, in every state of this land.

A no less important subject than ventilation and lighting is that of school furniture. We put a small child in a stiff chair, too high for his legs, too short in the seat for his body, without an adequate support for his back, and place him before a desk fitted to this chair and expect him to keep an upright position. It is not a Herculean task to measure each child on the first day of each term, and it ought not to be beyond the possibilities of the tax payers to furnish chairs at least approximating these measurements. Place the desks on standards, let the chairs be movable, and with a method a little less like cast iron than the present one, something may be accomplished not only beneficial to temper and school work, but of vital importance to the physical development of school children. It is a difficult task for the board of directors,—able lawyers, good postmasters, capable business men, to know just what the children need. As it falls naturally to the mother to provide clothing for the children, so it should fall to the teacher to order the furniture of the

schoolroom. To do this will add one more care, one more responsibility to the burdens of the teacher, but then the teacher must be the one factor of this work which Plato calls "giving to the body and soul all the perfection which they are capable of attaining." He must be an individual who possesses the wisdom of a Solomon, the energy of a Cæsar, the vigilance of a Washington, and the firmness of a Napoleon.

But to-day school teaching is a profession. The schoolroom is no longer a place for the young man who means next term to plead before the bar, or the young woman whose ambition in life is an offer of marriage.

School teaching presupposes long years of careful, methodical training, which must be supplemented year after year by scholarly work, but in addition, and valuable in the extreme, is the personal influence of the teacher. That indefinable something which we call personal magnetism is the teacher's most powerful aid. It is the means by which he influences his pupils morally, mentally, and physically.

School teaching as a profession, demands a compensation equivalent to that of other professions requiring equal time in preparation and equal skill in execution. The lowest average salary, \$15.36 per month, paid to women teachers in Louisiana, should secure a teacher of no higher qualifications than one required of a house servant. A teacher who must live out of this salary can scarcely be expected to be of superior mental standing. The highest average compensation, that of \$103.33 per month, paid to male teachers in Massachusetts, means a yearly salary of less than one thousand dollars. When we reflect that the average working man receives \$500 annually, the compensation for skilled labor is not so remunerative as to call bright men from the fields of business, or the professions of law and medicine.

There are men and women who are adequately prepared, and who from choice would engage in public school work, but are debarred by the insufficiency of compensation and by the uncertain tenure of position. Let the schools be removed from political influences, let the salaries be such that one may continue in this as in other professions, feeling that it is possible to keep abreast of the times and still be prepared for a rainy day, let the requirements for entering this be equal at least to those of entering other professions, and the plane of the public school teacher rises above that of the lawyer and physician and reaches in power and importance that of the minister.

"The public sentiment regarding our public schools," says J. L. Pickard, "is one of careful and intelligent criticism. With changes in industrial methods and in social ethics—a system of education claiming formation power must necessarily be closely questioned and in its process closely watched. We are under inspection—our defects will be seen and

publicly exposed. The excellencies in the system will not be magnified. Those who administer the system must be on the alert and study carefully the demands. It shall not escape the keen eye of the inspector if in any of the officers or rank and file of the great army of Public Educators there shall be found a satisfaction with past methods which forbids growth or improvement. The present sentiment is favorable to our common schools, if those engaged in the work shall be found living, thinking, and progressive women."

Another educator, H. H. Seerley, states, "In my field of labor there is no contrary opinion to the statement that public education is necessary and the poorest system of schools is an investment rather than an expense. To secure this condition many things have been done. Educational departments have been maintained for years in all the local papers. In these papers have appeared regularly all matter that could be used to show the work of the schools. Also editorials have been prepared weekly that would have the tendency to raise public sentiment in any respect, where there was a demand for improvement. I believe that the character of the excellencies of the schools of a community depends entirely upon public sentiment. I am inclined to the opinion that in this country under our system of government the public sentiment must be fully strengthened and developed before any progress can be made."

J. Wernli adds: "The public schools are regarded as a vital organ of our national life and existence. There is a wide spread opinion that our public schools are not up to the times, or in other words, that the people are ahead of the laws; they ask for more; they demand the education of all; there is a cry for proper mental, moral, and civil training for all classes."

S. S. Parr states: "There is a wide spread belief that ills can be cured by education. The fact that business men say that school education as now managed unfits its possessor for participation in business, is a tribute to this belief. We may divide public sentiment about schools into optimistic and pessimistic. The first greatly overrates the power of school education and neglects to take into account the spontaneous training derived from other sources. The persons comprising the class of optimists are teachers, ministers, reformers generally, and the more highly educated as a rule. The middle classes in society, the well-to-do, who are neither poor nor rich, neither ignorant nor very intelligent, furnish a large number of these. On the other hand, the rich, as a rule, are educational pessimists. They do not believe in school education as a means of benefiting humanity. Lawyers and doctors, among professional men, owing to the fact that they derive their power, very largely, outside of schools and school education, are often pessimists, or at least are distrustful of the power of education. But on the whole we must say

that there is an appreciation of popular sentiment in regard to public schools. Not only does conversation reveal this, but the universal demand from all classes of society for better school facilities shows an increasing sentiment in their favor. This is nowhere more apparent than among the more intelligent of our laboring classes. They see that if they gain power to deal with capital and the labor problem, it must come from more intelligence and better education. Mr. Powderly and other leaders among the Knights of Labor, have frequently spoken of the need of more education among their people. I have lately talked with a shoemanufacturer of Worcester, Massachusetts, a boss-carpenter of St. Paul, and a printer of Terre Haute and each of them said without any suggestion that the great need of their class was more intelligence, and each expressed distrust of present organization, unless supported by more intelligence.

There is a great unanimity of view among capitalists that the remedy for strikes and other disorders of the present is greater intelligence and more education among the working people. This is nowhere more apparent than in the South, where, until recently, the contrary opinion was held. But the majority of the southern people now believe that the one most potent agent for the uplifting of the negro must be his education.

These are some of the opinions of experienced educators with regard to the public schools. That we may not be accused of meeting together to sing each other's praises, it is but fair to consider the adverse opinions of some individuals not actively engaged in teaching.

Two individuals, the one a physician of twelve years' practice, the other a teacher for two years in one of the best colleges for women in the country, then a teacher in a superior private school in Boston, have been discussing some of the reasons for failure in preparatory work. They insist that public schools should offer two possibilities. They should prepare a student admirably for college, or they should make him ready to begin to work for an honest living with the expectation of earning all that he gets. The points in the argument upon which was put greatest stress are these: It was the case especially in schools of certain sections, that the unimportant is made to seem important. Oral work with its superficial methods is exalted above painstaking study. The experience of every American student who attempts study abroad is sufficient comment upon the system which undertakes to teach the Latin or German Grammar in six weeks. Superficial attention to lessons in childhood means that all work, be it house-keeping, street digging, business or a profession will be given what our grandmothers abhorred, "a lick and a promise." Lesson hours may be made as attractive as possible, but the most attractive lesson to be valuable, presupposes hard work from the pupil. Nothing in this life takes the place of ability to conquer a

difficult problem meet it where you will. Over and above the fiction that lessons are to be sugar-coated is the display often employed to tickle ignorant parental vanity. Little children are thrust forward in gas-light assemblies to be flattered by applause or disheartened by the silence which follows failure. Older children entertain their friends with gymnastic drills, with inflammatory declamations, with dialogues and music, the preparation of which is for months the monopolizing subject of thought and conversation. Graduation implies an enormous expense for dress and flowers accompanying the melodramatic high-flown bursts of would-be oratory, the most soaring and flowery of which are to be printed in the newspapers,—pernicious cultivators of over-weening conceit. After commencement the bills are to be paid. One of long standing begun in the days of childhood when sleep should have had her own, continued through youth, is paid only when death knocks at the door. For every nervous excitement the indebtedness increases. The minds of American children, with their inheritance of excitability, thrive no better on emotional display than do their bodies on a diet of chocolate creams and salads. If the public schools would lessen rather than swell the ranks of the insane, let them offer school children the meat and oatmeal of diligent study, and exercise according to approved methods. For legitimate study never injures but rather strengthens the mind. In this land that looks to free press, free speech, and above all to free schools for a solution to the nervous question and the labor problems, if the criticisms of these two persons is just and true, it behooves us to be up and doing to keep the nervous system of the children sound, to teach them, too, that no great success comes without painstaking effort.

III.—THE COURSE OF STUDY: ITS PROPER LIMITS AND DIVISIONS.

BY H. M. JAMES, OF NEBRASKA.

An inquiry as to the age at which a child begins to learn suggests a very curious speculation. It is so soon, no doubt, that the point will not be fixed too early. The apparently meaningless clutchings of a baby's tiny hands, in the first days of its existence are an effort by which it begins to take in the great system of nature and learn its laws. It does not as yet know how to control its own muscles; it has not learned that this confusion of images on its retina is a picture of an outside world, and that the objects he reaches for in his eyes are not there at all, but beyond; he has not yet discovered the difference between *ego* and *non ego*; but he makes all these matters a study, and in the first months of his existence he learns a vast number of things.

The amount that a child learns during the first two years of his life is amazing. In this time he comes to understand the most common laws of nature. He learns that food will satisfy hunger, and that water will allay thirst; that fire will burn; that there is a law of gravitation so that bodies unsupported will fall. There is no department of physical science of which he does not learn something. He learns to recognize a multitude of objects; he learns the names of a multitude of things; he makes progress in learning a language so that he understands much that he hears and finds it not difficult to reply. In no corresponding period of his life does he learn as much as in the first two years. No wonder that his little brain becomes weary, and he requires rest and sleep; or that he is nervous and fretful all through his baby days.

At four this child has made marvelous progress. He has acquired a mastery over his own muscles that is almost perfect. He now knows the names of great numbers of people and things; he knows many of the laws of health; he knows more facts and many of the laws of physical science; he understands and can speak his own language, as few people ever learn to use a foreign tongue, and this child that began his existence but four years ago has become a creature of wonderful intelligence.

At this point his parents begin sometimes to think of school. But he needs no crowding and he should have little restraint. If his mother have leisure and can give him her time, in games and talks and studies of ob-

jects, he will do very well with no other teacher. The character of the home influence at this stage of a child's progress is a matter of the gravest importance. If the home is what it should be the child will need no other school. But there are few such homes. Most children of four and five years of age are simply fed and allowed to run. A few are sent to school, which in most cases is worse for them.

Since so many children are neglected during this susceptible period, it seems reasonable that some provision should be made for their proper training, and this should be so general in its application as to bring its benefits to children of every grade of society. This is the field for the kindergarten; and although this institution seems not as yet to have acquired any stronghold on the American mind, it is plain that ample room exists for large numbers of well-conducted kindergartens in every city and town.

But in none of these institutions should any of the usual work of the school be performed. They aim to do that which is preparatory, but in no case final work. The kindergarten gives a training of the eye in the perception of form, size, and color; it gives a training of the hand in the handling of the various gifts; it gives a training of the judgment in asserting and arranging the various articles used in the school; there is a training of the powers of speech in almost every exercise undertaken; and a training of all the faculties day by day, in the unconscious use of them in the various games and exercises. All of this becomes of immense value when the actual school life begins. A skillful kindergartner will keep her pupils two years on these games and occupations, training and developing their powers in the best manner, without giving a lesson in what is ordinarily considered the legitimate work of the school. What is much like this training is sometimes given with great success in the home, and as often the so-called kindergarten accomplishes nothing. But there will always be ample room for competent kindergartners, as there is for intelligent mothers.

In the whole field of moral and educational effort, there is no spectacle more sickening than that of the ignorant fathers and mothers,—oftentimes vicious and cruel,—to whom is wholly committed the training of multitudes of children during this most plastic and impressible period of their lives. In view of the neglect and wretchedness in which so many of them grow up, and the consequent degradation into which they are liable to fall, the fact is mitigated that in their infancy many children droop and die.

By an almost unanimous agreement, at six years of age, children are put into school. They seem at this time to have attained to a sufficient degree of physical and mental development to undertake school duties with

advantage, and the period cannot well be made later, as the greater part of them will leave school at an early age, and time should not be wasted in unnecessary delay.

Having entered school the pertinent inquiry arises, What shall be the studies of the first school year? If knowledge and culture could be poured into a child's mind, as water is poured into a vessel, the solution of this problem would be easy. But while knowledge comes from without, training comes from within, and knowledge without training brings very little power. The idea of development should be constantly in the teacher's mind. Even with those children who have had good previous preparation, haste must be made slowly, and especially with the great mass of children who have had no preliminary training at all. Books at first would be a hindrance. The character of the teacher is everything, and so important and delicate is her work that she has need of an inspiration from on high. Much of the work of the first year should be but a continuation of the kindergarten. The lessons in form, size, color, and order should be a prominent feature in this first year. Clear perceptions of numbers and objects require constant reference to material things. The physical world when properly presented is an apt teacher. Work and play should be so combined in this first year of school life, that while mental development progresses, day by day, the child is conscious of little more than a series of games and recreations. It is important that the first months of a child's school life shall be full of delight and pleasure. How absurd to assume that for the delicate and responsible duties that belong to this initial year, the teacher of few attainments and low grade certificate may be altogether adequate.

More attention should be given at first to preparation for subsequent work than for what is usually considered progress in study, nevertheless with a child six years of age, there may be some advancement in the more tangible work of the school. His hands may be trained to hold his pencil and book, and he can easily make considerable progress in learning to write and to read.

While attempts to force facts and information into a child's mind at this early stage are always worse than useless, he has an extraordinary aptitude for language, and training in this line is not likely to be overdone. Progress may be made in reading and in the use of language in the first school years without danger of overtaxing the mind. On the contrary those influences which stimulate progress in language culture appear to furnish the very conditions most favorable for most healthy mental growth. For the first three or four years, or through what is known as the primary grade, this language training should constitute the chief feature of school work. Most efforts beyond this are of little avail.

When a child has learned to read, as he should by the close of the pri-

mary period, he may with profit begin the use of books, and along with them may come the other studies of the elementary schools. By common consent these have been made to comprise three groups.

First, a language group, including reading, spelling, writing, and composition, and later on technical grammar. The value of these studies, except the last, no one questions. The value of English grammar will be sufficiently appreciated when its object in a course of education is properly understood and its place in the curriculum wisely fixed. Its object is disciplinary rather than practical, and it should be assigned to the very last of the elementary course.

In the *second* group, which is scientific, are included geography, history, and physiology. None of these studies have much disciplinary value, but they are daily useful, and serve as an introduction to the great field of intelligence which every child is expected to enter through his subsequent reading and acquaintance with the world. They belong almost exclusively to general culture and will easily hold their place in the elementary curriculum.

In the *third* group are numbers and arithmetic, both practical and disciplinary. The right of these in a course of study will always be admitted, though the supreme importance of arithmetic will often be questioned.

Still another group is finding its way into the elementary course of study, though as yet but little progress has been made in this direction. This group is industrial, and may include sewing and needlework for girls, the use of tools for boys, and drawing for all.

The conditions of social life in this country are peculiar. Every year great multitudes of people from foreign lands, with no knowledge of our institutions, and no training for their new responsibilities, are added to American society. A still larger number of our own youth must be trained every year for the most important civil duties. The public school is the only agency that can perform this work successfully, and out of all these various elements produce a homogenous class of citizens. The family can do part of this but not all. There are too many poison fountains to send forth a pure stream of healing waters. The ordinary intercourse of society cannot do it, for social life runs into grades and classes. The private school cannot do it, for it reaches only a few. The church itself cannot, for its influence is felt least where it is most needed. The public school and the public school alone is and must be the great assimilating agency of American society. Like the digestive organs, out of the various materials that enter it, it produces the very elements needed for strengthening our civil life. It is the most American of all American institutions, and is as essential to the permanence of the government as is the stomach to the life of the human body.

The proper aim of the public school is to prepare for the duties of citizenship. This will be done best by promoting the highest degree of intelligence possible in the time allowed, and as far as it can be done by preparing for the practical duties of life. It has long been held that cultured minds and hearts are an equipment for the duties of life. It is evident that if in addition the hands are trained for some industrial occupation, the outfit is more complete. Few persons trained in the intelligence and morality of the public schools, if they also are trained for some industrial employment, will be likely to go wrong. With this thought in view, the studies outlined in the four groups just given, better than any other suggested, meet the demand for the period covered by the elementary schools. Doubtless some minor changes will be made from time to time, but as a whole the scheme is likely to remain.

The theory of the aim of the public schools, as just stated, amply justifies the existence of the high school in a system of public education. If our institutions ever fail, and anarchy succeeds where good government has prevailed, it will be because the schools will not have done enough in preparing our youth for the duties of citizenship. It will be because the American people will not have been sufficiently trained in the morality and intelligence which the public schools are endeavoring to inculcate. If the schools could exert their influence more widely, the future of these institutions, which we hold so dear, would be less uncertain. In the larger education of our citizens, in the more matured thoughtfulness and higher character resulting from a longer school period, there would be hope of safety. Not to support the high school would be to ignore the grounds on which the common school rests; to enlarge and extend its influence is to strengthen the foundations of society.

Within a few years a criticism has been urged against the high school, that while it has furnished the genteel occupations with abundance of candidates, its tendency has been to educate the people away from industrial pursuits. But the world needs cunning hands as well as cultured minds; it has more use for mechanics than for professional men. While the candidate for a clerkship goes begging for employment, the skilled industries cannot find enough workmen, and to the manual employments many high school graduates must ultimately look for an occupation. It has been urged with much reason that the schools are not doing their whole duty in preparing young men for the duties of citizenship when they are doing nothing to prepare them for the every-day duties of life. Boys have discovered that the schools do not give them the training they most need, and too early they have left the school to learn a trade. This criticism is entirely logical, and it leads directly to the necessity for the manual training school. In a few places such schools have been established in connection with high schools with the most satisfactory results. There is

little doubt that in all large high schools, departments of this class of schools may be made valuable adjuncts. They involve no necessary abridgment of the academic course and they have a strong tendency to hold boys in school at a time when they are strongly inclined to leave. In addition to the full academic course which the graduates of such high schools have acquired, they have also gained such a degree of mechanical training that a trade may be acquired in a short time after the school course has been completed.

The manual training school is a legitimate part of the public school course, and in the years to come it will undoubtedly hold a prominent place in city school systems. The thought is a new one; many difficulties will attend the introduction of such schools; many mistakes will be made; and they will meet with serious opposition from conservative friends of public education, but with the large relative increase of urban over rural population in this country, this class of schools will be needed more and more. The high school came in the face of much opposition, but it has come to stay. And in the same way the industrial school will ultimately make for itself a place in the public school system of this country.

In the preparation of to-day's programme for this survey of common school education, it was assigned to me to discuss the course of study,—its proper limits and divisions. The proper divisions of the course of study have been outlined. I attempt to fix no limits beyond what are determined by the financial ability of the community in which the school is located, and what is needful for the best training for citizenship. The children of that great host that comes to us through the constant tide of immigration, as well as the youth of our own people, must be so trained that they will be fitted for the responsibilities of American life, and the agency to do this is the public school. It is the great conservator of our social order. Its influence extends to all grades of society, and to almost every individual at the time when their characters are most easily fashioned, and to limit the course of study of the common schools to a narrower range than has been indicated, would be to restrict its influence and thus endanger the future of American institutions.

IV.—COURSE OF STUDY: ORDER OF SUBJECTS WITH REFERENCE TO LAWS OF GROWTH.

BY MISS MARY B. PHILLIPS, OF ILLINOIS.

One achievement of the present century is to bring home the lesson that "the highest success is possible in no department of human activity except the knowledge underlying the right performance of the work in hand has been obtained, and the principles thus discovered have been well used to the ends required."

Before a theory can be formed or a principle discovered, there must be a mass of traditional knowledge gained by experience, or trial and observation. This must always continue to be the main source of guidance with respect to practical details; but a knowledge of scientific truths in relation to any art or practice gives a deeper insight into its nature, and the conditions under which it is necessarily carried on; hence the "knowledge underlying the right performance of the work in hand" is best attained by combining well conducted observations and experiments made in actual practice with general principles derived from the sciences.

So well is this understood that it is no longer thought that mere empirical knowledge is sufficient for one who would take the highest rank in any art or profession. To practical skill must be joined acquaintance with theory, and to acquaintance with theory must be joined practical skill.

The man who has a wide connection with affairs must have a correspondingly broad understanding of controlling principles. The statesman needs to know what are the just principles and the legitimate end of government, and all that is ascertained of social phenomena. The physician must add to his experiences by the sick bed all that the sciences on which his profession is based can reveal to him. It is not enough that the poet, or the artist should be born a poet or an artist; he must have the aid of organized knowledge. The sculptor must understand the principles of mechanics and of physiology. The painter must understand the laws governing the appearance of objects to the eye. The musician must understand not only the principles of harmony, but the laws of the natural language of emotion. The poet must understand not only the laws of rhythm, but certain general principles which the mind obeys. No one who is willing to apply himself need be ignorant of what is at present

discovered of the laws and principles underlying successful work in his chosen career. Perhaps in the purely mechanical arts the subordinate workman possessing only the trained eye and the skilled hand, capable of going through the process of making a machine, or his part of it, with no knowledge of theory, and with no wish and with no capacity for a higher position, may be convenient and even necessary; but in the regions of intellectual activity, the case is different. The world does not need, the world has no place for teachers who are content to be ignorant. It is not enough that a teacher who would achieve the highest usefulness in his profession should be born a teacher; it is not enough that he should have a memory stocked with the methods pursued by others; it is not enough that he should have a knowledge of textbooks; but to native aptitude for his work, to a practical acquaintance with routine, and to a mastery of subjects in his department, he must add a thorough assimilation of the leading truths of that science which examines into the faculties, determines the manner and the condition of their working, and traces the order of their development.

The moment he comes into the presence of young lives as a trainer and guide, what problems present themselves to him! What is the nature of this soul with which he has to deal? What are its powers, its possibilities, its needs? What is the end to be sought? What risks are to be avoided? What obstacles are to be overcome? What are the methods which will bring about the end desired? What truths are most easily and naturally received at first, or as the foundation for others? How shall he measure and judge the effect of his instructions? What degree of repetition and inculcation is necessary? What illustrations are best? How can individual peculiarities be addressed, or corrected?

It is to Psychology in connection with the results of experience that he must look for the answers to these questions as far as they can be answered, in the present state of human knowledge. It is this Science that shows him the complex character of that with which he must concern himself; in how many ways it may grow; how many influences must combine for its full exercise, and how variously determined is its growth by individual nature. It is this which gives him the principles which are a necessary supplement to the rules gained by experience, and by which, to some extent, the very smallest details of school management may be aided. By connecting the empirical rule with a scientific principle, he is in a position to understand it, to know why it succeeds in certain cases, and why it fails in others.

There have been many who have labored from century to century to penetrate the mystery surrounding the relations of the physical organization of the living being to the acts of its psychic and intellectual life. The advances made by other sciences have given them much aid, but they

are still as far as ever from penetrating into that Holy of Holies where the physical change is translated into the psychical change, where the Immortal Essence sits enthroned, and by means of its appointed agents, enters into relations with a material world. It does not come within the scope of this paper to describe those agents and to state what is known of their mode of action, or to give the opposing theories that have been formed, and the discussions that have arisen. There are psychological principles on which there is a general agreement, and some of these, with their application to school work, are to be briefly stated.

Correct education or training must conform to the law of all growth, that it is appropriate exercise which strengthens faculty, and it must conform to the natural order of development of faculties. Those which develop first must be exercised first. It is vain, for example, to cultivate the power of abstraction before the powers of preception and imagination have reached a certain degree of strength. The process of development is too continuous, and too complex for it to be possible to say that in such a month or in such a year of child life the boundary line is passed which separates periods characterized by the predominance of different faculties; but for convenience, some writers have made four divisions, extending to the time when school education is finished.

In this scheme the first three years is that of sense and instinct, in which the child is mainly engrossed with external things. There is an interested observation of all surrounding objects, and names are connected with them, articulate capacity being now developed. In the course of the next four years, the internal mental activity comes up to, and balances external activity, or sense preception. Up to seven years of age, the brain grows with great rapidity, and develops changes in its structure; following the analogy of the muscular system, it is concluded that the times of rapid growth are the times of more special susceptibility to the bents imparted. If the brain is still unable to grapple with the higher elements, it is making great progress with the lower. Whatever it can take hold of, it can fix and engrain with an intensity proportionate to its rate of growth. That is good reason for looking well to the sort of impressions made upon the child during the first seven years. It now gives its attention automatically to any object that attracts it. To the work of its experiments upon the material world, it brings great activity of intellect, freshness of interest, energy of will, and eagerness of desire. A large part of the training of the senses should be done in this period before the child comes under the systematic discipline of the schools. If this education of the senses be neglected, the result will be a limitation of all after knowledge.

The third period, from the seventh, to the fourteenth year, is that in which the internal activity gains a distinct ascendancy over the external.

The fourth period is from the fourteenth year to the end of school life; in which the higher mental powers appear in full development. It is to the third period, extending from the sixth or seventh to the fourteenth year, that this discussion has special reference.

The work of systematic instruction in school now begins, and the consideration of the development and growth of the intellect furnishes the principles by which to arrange the order of the studies. Since, before the process of thought can be applied, materials must be gathered in large abundance, and since, to provide for these, Nature has made acquisition and memory comparatively easy and spontaneous for childhood, and reasoning and science difficult and unnatural, it is established that studies should be first pursued which require and discipline the powers of observation and acquisition. The plastic power of the brain, so great before the age of seven, is still greater from seven to ten. At this period, it reaches its maximum; hence this is presumably the maximum of pure memory. It is sometimes spoken of as the language stage of mind, and the reading and speaking of the mother tongue, with the mechanical arts of writing, with the simpler forms of drawing, are the first pursuits in order.

We avail ourselves of the language stage of mind to forge adhesive links that are not so easily forged afterward. Principles, maxims, theories, formulas, definitions that need to obtain a firm place in the memory, may be given even in advance of their being fully understood. Concrete work in arithmetic may come now; the tables may be learned; the processes in fractions may be learned before the reasons can be comprehended. There is plenty of interest in the operations. If the terms are all clearly conceived, the directions followed, and the results accurately arrived at, there is nothing to unlearn. The memory for words should now be exercised and stimulated. Choice tales and poems should be learned for recitation; natural history in all its branches should be pursued with the objects before the eye,—flowers, minerals, shells, birds, and beasts. Many facts of history and geography may now be fixed by repetition and stored away in order. The commencement of science needs not merely a preparation of concrete facts, but an advanced form of interest or emotion, and a great control over the mental attention. The directing and elevating of the imagination, the training of the will, discrimination, comparison, and explanation have all been gradually involved in the training of the language period, and the way paved for the severer processes of thought; yet there is a jump in passing out of the life in particulars to the life in generalities. There must be a distinct phase of brain development. The power of abstraction, of analyzing things, and discovering their common aspects, qualities, and relations, only attains a considerable strength after fourteen years of age.

Geography, as a serious study, should scarcely be taken up before ten years of age, because it is a task of the pure conceptive power, and a younger child has but little concrete conceptive faculty. The basis of the conceptive faculty is necessarily experience of things, of scenes, human dwellings, inhabited cities, and all their component parts, living beings, men, animals, plants, operations and activities, social gatherings and intercourse. The wider this experience at the commencement of geography or history, the better. Next to experience are motives to attention and observation. The full bearings of history cannot be understood without an amount of previous knowledge and experience of the world, such as only maturity can give; but it can be advantageously studied after the twelfth year. The age of grammar and of higher work in arithmetic is put after eleven or twelve years, because they require a riper state of the faculties. Some intellectual exercises that are impossible at one age become easy at another through the fact of brain growth alone. This is consistent with all experience. It often happens that you try a pupil with a peculiar subject at a certain age and you entirely fail.

Wait a year or two, and you succeed, and that, seemingly, without having done anything to lead up to the point. In regard to mathematics and grammar, a difference of two or three years will do everything.

On memory rests the possibility of mental growths, but while great stress is laid upon its exercise and training, it must not be forgotten that to have mere knowledge of the particular and concrete is not to be educated; and that it is a nice problem to judge how much time should be devoted, in a given case, to pure memory work. "As the growth of the body and the increase of its capabilities are dependent not on the accumulation, but on the assimilation of food, so it is not in the accumulation of experiences, but in the increase of its capacity to deal with them, that the growth of the mind essentially consists."

Every impression sufficient to awaken consciousness, has a certain permanence. It can persist after the original ceases to work. It can be restored afterwards as an idea, or a remembered impression. Usually, we need several repetitions, in order that a permanent and recoverable idea may be left.

During the period of brain-growth, as has been already said, it is characterized by modifiability or plasticity. It is then easy to make impressions permanent. Sooner or later, the structure of the brain becomes less modifiable; but the acquisitions already made render further acquisition easier by offering more points of attachment; hence, although our adhesive faculty is not improving as we grow in years, our facility in imbibing new knowledge improves steadily. When we have to learn an exercise absolutely new, we must engrain every step by the plastic adhesiveness of the brain, and must give time and opportunity for the ad-

hesive links to be matured; but when we come to an exercise containing parts already acquired by the plastic operation, we are saved the labor of forging fresh links as regards these, and need only to master what is new to us. The bearing of this circumstance on mental growth is great. After a certain number of acquirements of various regions of study, nothing that occurs is absolutely new. Too much stress cannot be laid upon the necessity of frequent repetition to fix impressions. To advance at a moderate, steady pace, to see each step familiarized before entering upon the next, always has been and always will be the rules of all difficult acquisition. If associations are not repeated until they are firmly fixed, to the extent of rendering elementary processes automatic, there is incalculable hindrance to subsequent easy and accurate work. Final success depends very much on obtaining complete mastery of tools.

The plasticity of the brain should be aided by surrounding the child with every circumstance that will aid concentration of the attention. All intellectual guidance of the young implies the power of holding this. External circumstances and internal emotions must be, to a certain extent, controlled. This involves some understanding on the part of the teacher of the theory of motives, which is the Theory of Sensation, Emotion and Will. It should never be forgotten that the human mind can attend to only one thing at a time; although it may shift the attention very rapidly, and thus overtake two or more things by turns. We should beware of giving a child too much to think of at once, and of distracting his attention from the point we wish him to master. There are teachers who take pride in bringing many widely divergent ideas into the course of one lesson with the probable result (though that they do not anticipate), of fixing no one of them. When the very groundwork has to be laid, distracting views are to be particularly avoided. Before criticising, controverting, or amending the contents of a textbook, the teacher should make his pupils perfectly familiar with its details.

V.—PRINCIPLES OF METHOD, AND COMMON ERRORS IN TEACHING.

BY MISS AGNES I. ROUNDS, OF NEW HAMPSHIRE.

Teachers are everywhere searching for some new method, some device by means of which their efforts may become speedily fruitful; but how few profit by the example of Nature, the great teacher whose methods are as old as the race. Many and marvelous are the educational schemes and systems which the mind of man has devised, but real success has been won only by those teachers who have, consciously or unconsciously, followed nature's method.

In view of this fact it will be the object of this paper to call attention to Nature's work as a teacher, and to the principles which underlie it, rather than to enumerate those countless rules which, as fundamental principles of teaching, are so often misunderstood and misapplied, with infinite harm to the victims of a professional zeal which is not supported by adequate wisdom.

To understand Nature's method, it is necessary to observe her work in general and in its minutest details. Thus it will be seen, first, that *she secures the development of the individual through exercise*, and second, that *she adapts this exercise to three distinct periods of mental development*.

The infant opens her eyes in a material world. She has a mind as yet undeveloped, whose original powers of sense-perception have certain properties, susceptibility, tenacity, and vivacity. She has bodily organs through which the mind may be reached. Through the senses the intuitive faculties are exercised and developed, while the child gains those fundamental notions of things, which are essential to the acquisition of knowledge. She looks at her toys and the gay colors are a delight to her; she shakes her rattle and is equally charmed by the sound; she handles whatever comes within her reach and learns that things are hard or soft, rough or smooth, cold or warm, round or flat; she tries her strength against the forces of nature and learns many qualities of things through an exercise which, although it adds to her stock of ideas, brings down the household wrath on her innocent young head. Not satisfied with her fund of knowledge, nor daunted by the painful results of her investigations, she tests everything also by taste and smell as she repeats her experiences again and again, while her notion of the world is made up of little else than material attributes.

Left to nature, the child learns rapidly and gains mental strength each day through the constant exercise which a restless curiosity enforces. Nevertheless, a wise mother or teacher can render the greatest assistance in promoting the child's development, while any effort to lead rather than to follow nature must prove abortive.

Most teachers recognize the fact that the first teaching of the child must be intuitive, but results prove that many do not fully understand the application of this principle; they do not see that there is a great difference in children, that some have far outgrown the intuitive period when they enter school, while others, from the nature of their previous environment and with weak original powers, need careful intuitive development. In a school where all are subjected to the same process of intuitive training, many children appear dull because, having outgrown the need of it, they are tired of the useless repetition, and with nothing to do which requires mental activity their minds become torpid. Even with those who need this intuitive development very poor work is often done. Like the principal of a city training school who instructed her class that the sole purpose of object teaching was to amuse the dear children, many teachers do not fully understand the laws of mental growth, and there is an aimlessness and a lack of persistency in their efforts which does not serve to strengthen the minds of their pupils, and which leaves the sense-perceptions incomplete. There is a resulting lack of the intuitive basis essential to the acquisition of real knowledge, and a dearth of material for true judgments, for if the fundamental notions are not correct the knowledge based upon them can not be.

Thus, to succeed in teaching young children it is necessary, first, to study the individual and to determine the degree of susceptibility, tenacity, and vivacity of the original powers; second, to aim to bring about a harmonious development by presenting objects upon which she can exercise her senses with profit and pleasure, and by directing this exercise toward the desired end; third, to repeat impressions until the notions formed are clear and well defined; fourth, when the intuitive basis is complete, to change the method of teaching.

As the child outgrows the period of infancy, the period when her knowledge must be gained almost wholly through the exercise of the senses and the intuitive faculties, she begins to realize that this is a strange world; that the forms, the colors, the sounds, tastes, and odors which have been to her such a delight belong to things and not to her; that she is a small part of a large world which does not revolve about her after all. Concerning *things*, she begins to ask the countless questions for which she is often censured when she should be answered with the greatest care, for nature means that she should learn at this stage of her development by constant exercise in forming concepts.

The curiosity which, during the period of infancy, led to an exercise of the intuitive faculties in learning the attributes of every object within reach, now enforces an exercise of that lowest form of the imagination, sometimes called the conceptive faculty, by means of which ideas already in the mind are combined and re-combined. Only by constant exercise of this faculty can the child gain that knowledge of facts which must serve as a basis for future generalization.

When the child has become familiar with the facts concerning that part of the world which is in her immediate vicinity, her curiosity demands a more extended knowledge, and her imagination, arranging and re-arranging notions already gained, pictures scenes and events beyond the reach of her senses. What more delightful task than to gratify the child's natural curiosity and to stimulate her vivid imagination by revealing to her the wonders of this strange world!

After a time the child opens her eyes to see that the world about her is one of surpassing beauty, and the suddenness of this discovery adds to the delight of the new experience. The blue sky is bluer than ever before, the fields are greener, the perfumed air is more intoxicating, and nature is revealed, not merely as a thing of beauty, but as the soul of truth. Thus that higher faculty, which Ruskin calls the penetrative imagination, is born, and by its exercise the individual is enabled to recognize at once vital truth and beauty. Nature strives to surround the child with all that can call this faculty into action, but her efforts alone are not sufficient, for most children are shut off from much that is true and elevating, while many are surrounded on all sides by what is base and false.

Those who are responsible for the child's welfare can not be too careful to aid nature, by choosing her environment, and it is here that the most sacred duty of parents and teachers is too often neglected, for while this penetrative action of the imagination can not be fully explained, it is really the basis on which, if rightly used, a strong and beautiful character may be built, or if perverted, the most low and vicious. Feeding on poison, this divine power is dwarfed, and truth and beauty are no longer realities; the mind grows narrower and the character grows weaker day by day. A vicious play of fancy is the hideous caricature of what should have brought health and happiness, while an unsatisfied longing proves that, although it is not possible to *kill* one of the noblest faculties of the mind, it is easy to make life worse than death through poison and starvation.

As Ruskin so vividly expresses it: "Imaginative men study the hardest and are most thirsty for new knowledge. Fancy plays like a squirrel in her circular cage and is happy, but imagination is a pilgrim on the earth and her home is in heaven. Shut her from the fields of the celestial

mountains, bar her from breathing their lofty, sun-warmed air, and we may as well turn upon her the last bolt of the tower of famine."

During the imaginative period — the period of childhood — a twofold end is to be kept in view. First, the child must be made familiar with those facts which serve as a basis for future generalization, and second, the foundation for a noble character must be laid.

To accomplish the first aim it is necessary that the teacher be guided by the natural curiosity of the child, and by vivid and faithful description, by appeal to the child's love of incident and anecdote, and by constant reference to the knowledge already gained through the senses, cultivate in the child the power to form clear ideas of scenes and events beyond the reach of the senses. To accomplish the second aim it is necessary to present to the mind of the child subjects which will arouse the penetrative imagination to its full capacity, subjects whose innate principle is truth and beauty. Through constant exercise of this faculty, the ideals of truth and beauty will gain such permanence in the mind of the child that whatever is false will be hideous and instantly rejected. With such a basis there need be no fear for the mental and moral future of the child.

The imaginative period is one of constant questioning. The child depends on others for her information and has faith to believe what is told her. But as she develops she ceases to accept facts, she demands reasons; she is no longer satisfied with merely *feeling* truth and beauty, she wants to know their source; she begins that search so familiar to all of us, the search for first cause: she begins to doubt; she is no longer willing to accept the opinions of others; she investigates—questions herself—thinks. This change indicates that the mind has begun its period of maturity. Arbitrary teaching is now worse than useless, it is irritating. The world is a puzzle and the logical faculty demands an explanation. Nature leaves the individual to work out the puzzle through experience and the exercise of the judgment, but a wise teacher can abbreviate the process by choosing the material upon which the logical faculty is to be exercised, and by directing this exercise toward some definite end, by leading the individual to observe, to compare, and to generalize, not by performing these mental operations for her.

The teacher should aim above all to develop in those intrusted to her care the power to apply knowledge of cause to produce effect. Thus only can knowledge be utilized. Nature is never at fault in this respect. Those who learn from experience find their teaching so dear that they seldom care to repeat a mistake.

As to First Cause: Nature surrounds the individual with beauties which awaken her noblest thoughts and emotions. The rest she leaves to that higher mental power that we call Reason—a power which we cannot explain, but which enables us to know intuitively and certainly those things that are beyond the reach of sense and understanding.

Those who take nature as a guide will strive to lead the youthful doubter to feel the Divine power in the works of nature. This is all that can be done. No amount of theology can convince one whose mind has so suddenly awakened to a painful restlessness, and when the great first cause which she has been seeking speaks to her from the majestic hills, from the moaning sea, in the storm or in the peaceful calm of a summer day, the doctrines invented by man will have no more power to torture her.

It is essential to the welfare of the individual that when she reaches maturity—the logical period of mental development—she be guided by those who are wise and strong and true. She must no longer be treated as a child. Since it is only through exercise of the logical faculty that it is possible to gain and to apply knowledge of cause and effect there must be constant appeal to her judgment; she must be led constantly to look at realities and to see relations. Facts must be presented and she must be left to draw her own conclusions. They will often be far from right, and her views on many points will be extreme, but she must not be condemned nor ridiculed. She is walking in darkness over treacherous ground. Gleams of a false light may lure her more than once toward the quicksands, but again and again, so long as she is sure of a faithful guide, she will return to tread her way, step by step, on to firm ground and into the broad light of truth.

In considering the necessity for adapting the subjects taught, and the methods of teaching them, to the various stages of mental development, it must not be forgotten that children vary greatly as to the length of these three periods. Some pass the intuitive period very early, owing to the strength of their original powers and to their environment, especially as regards the intelligence of the mother. Others, for lack of these advantages, develop slowly, and we call them dull.

Many, after entering the imaginative period, never get beyond the exercise of the associative faculty because, owing to vicious parentage and influences, the mind never reaches the height whence it can survey truth and beauty. With these, a vicious fancy runs riot, and each day sees them more completely given over to the powers of evil. Here, indeed, is a field for missionary work, and it must be done if our country is to be saved from all the horrors which ignorance and vice can entail upon it.

Again, many never reach mental maturity. Drawn away by our modern civilization from the influence and teaching of nature, and without the guidance of those who could interpret for them the history of nature's teaching—the experiences of the past—they are utterly incapable of dealing with the problems of life. As a result, we have the mass of people, who, from great lack of knowledge and greater lack of ability to apply and to use it, are reduced to poverty and then to crime. We have, also,

that familiar class of people, who, with some knowledge but no power to see cause and effect, are likely to make vastly more trouble. Not reduced to that poverty which makes them careless of everything but themselves, they seek, because they cannot understand it, to change the established order of things, little knowing the ruin that may result.

It must not be understood that the claim is made that the faculties are confined in their exercise each to a certain period of mental development. On the contrary, the reasoning powers begin to develop quite early and long before the child can be taught to any extent by logical processes, while all will agree that the imagination lends its beauty to the whole life. The fact is, that during each period of mental development certain faculties are in the ascendant, and if the work of the teacher is to secure worthy results it must be shaped in accordance with the laws of mental growth. She must study not only the mental condition of her school, but of each individual in it, and while the special aim should be to develop those powers of mind which are most active, the other faculties must not be neglected, and, above all, they must not be repressed.

The failures in teaching, already noticed, are easily defined and a remedy may be easily found, but the glaring defect of our public school training is not to be so readily dealt with.

Shelley says: "He gave man speech, and speech created thought, which is the measure of the universe." What wonder, then, that the average school teacher has accepted quietly the fallacy that there is no thought without language. The truth is that we have many notions clearly formed for which we have no corresponding term. The expression lags behind the thought, and those judgments, to which we give the name sagacity, are formed from the original elements of thought, and have not been and cannot be put into words. Further, if there is no thought without language what can be said for those "unthought-like thoughts which are the souls of thoughts" that Poe speaks of and that we have all been dimly aware of, and how is it that we are continually reading what we seem to have known always? We are sure that we have had the same thought, though we did not or could not put it into words.

Owing to the present educational demand for a cultivation of the power of expression—for the term as an immediate consequence of the idea—the idea is often hazy and the term as useful as it would be to a parrot. In books the befogged children see, like Hamlet, words, words, words, not like him, because the mind is preoccupied, but because it was never occupied. The grand thought, the ennobling influence of the life made known through those words, is lost, owing to the fact that in the public school there is little fostering of independent thought and sober reflection. The aim of education is set too low, and few of the men and women engaged in public school work possess those qualities of mind and heart which

constitute true culture. Thus they do not feel the necessity of surrounding children from first to last with those influences which must in the end compel thought, and they have not the patience to wait until thought and reflection have done their work in elevating the individual and making her capable of still more powerful thought—thought which must shape her character and eventually influence all those who come in contact with her.

When we consider what a rare thing it is to meet a person whose presence is an inspiration and whose conversation is worth listening to ; when we consider how few preachers and public speakers ever say anything that is worth remembering—ever refresh us with a single idea—we must acknowledge that foreigners are not so far wrong in calling us a crude and uncultured people. While our system of public education may at its best produce sensible, practical men and women, it could never lend much influence towards shaping the future of a Mary Livermore or a Phillips Brooks, a George Eliot or an Emerson.

Finally, to summarize the points which it has been the object of this paper to make :

The only true method of teaching is that which imitates Nature, the great teacher.

To understand Nature's method it is necessary to observe the work in general and in its minutest details. Thus two principles appear as fundamental to her method. First, *she secures the development of the individual through exercise*. Second, *she adapts this exercise to three distinct periods of mental development*.

During the period of infancy—the intuitive period—the world appears to the child as made up of little else than material attributes. She gains fundamental ideas through an exercise of the senses and the intuitive faculties.

During the period of childhood—the imaginative period—the world appears strange and then beautiful. The child gains a knowledge of facts through exercise of that form of the imagination oftener known as the conceptive faculty. Ideals of truth and beauty are implanted in the mind through exercise of that divine power called the penetrative imagination.

During the period of maturity—the logical period—the world is a puzzle and life a problem. The individual gains a knowledge of cause and effect through experience and the exercise of the logical faculty. Doubt concerning first cause and future existence changes to some degree of trust through the influence of Nature and the convincing power of Reason.

Comparing the work of the average teacher with our ideal, it is evident that the most common errors in teaching are :

First. An irrational grading and teaching of subjects, and a failure to exercise the various faculties of the mind, with a consequent lack of definite results.

Second. An incomplete and aimless development of the intuitive faculties, with a consequent lack of the intuitive basis essential to the acquisition of real knowledge, and of material for correct judgments.

Third. A failure to develop the imagination, with consequent lack of power to form clear ideas of scenes and events beyond the reach of the senses, and to penetrate to real and essential truth.

Fourth. A failure to develop the judgment, with a consequent lack of power to see realities and relations, and to apply and utilize knowledge; which is likely in the end to induce distorted views of life here and hereafter.

Fifth. A neglect to foster habits of thought and reflection, with a consequent lack of culture.

Finally. As a result of such imperfect training, there is a failure to secure the harmonious development of the individual.

VI.—COUNTRY SCHOOLS—SUGGESTIONS FOR THEIR IMPROVEMENT.

BY JOHN C. MACPHERSON, SUPERINTENDENT WAYNE COUNTY, IND.

The task assigned the writer of this paper is to present special suggestions for the improvement of the country schools.

Assuming that all to whom it is addressed are informed as to the condition and needs of that class of schools, I shall proceed, at once, to the presentation of *four expedients*, each designed to accomplish a certain end in a general scheme for the betterment of these schools.

Expedient One—To Define the Scope of the Instruction to be Given.

The Commissioner of Education once said: "The efficiency of these schools would be greatly increased by proper attention to the *order* and *continuity* of studies."

A suitably arranged course of study becomes the most important factor in the attempt to improve the rural school. It is at once the foundation and keystone of the new structure.

The curriculum, or formulated course of study, plays an important part in the management of the college, the high school, and the city graded school. If it is of service in institutions where experience, custom, precedent, and external and internal influences all assist in the accomplishment of the purpose of the institutions, the necessity for its equivalent must be great in schools isolated as are country schools; where a wide range of topics is to be touched, a diversity of age and mind to be met, and where inexperience is oftentimes the successor, if not the companion, of indifference; and where the influences distract rather than encourage the efforts of both teacher and pupils.

The work of the common schools underlies the later work in the high schools and the colleges, in many cases; and in all cases it underlies the business of life, in commerce, in the industries, and in the professions. The demand for thoroughness and systematic training is as imperative in these latter cases as in the case of the college itself.

The statutes of the respective states merely name the branches which the local authorities shall provide to have taught in the common schools, leaving the order and details to be determined by the officers and teachers in each locality.

Hence we reach the necessity for an authorized curriculum, to define and outline the character and scope of the instruction proper and necessary to be given in what are known as the elementary branches—thus presenting the true field of the country school.

In the attempt to define the scope, two purposes are to be kept constantly in view: (1) to give all the instruction intended, to each child, (2) to give it in proper order.

The authorized course of study becomes the chief instrumentality in attaining these ends. It points out to teachers, pupils, and parents what should be done at various times in the several branches, to make the child's career at school continuous and progressive until the full acquisition of what is intended for him, and what is his right to expect from such schools.

In localities where a course has been adopted and followed, it has shown its utility in securing a uniformity of textbooks, in inducing pupils to undertake the study of a proper number of branches, and in indicating the times at which the several studies should be commenced; thus tending to secure proper relative advancement in all the branches. It has been the great guide in the movement commonly known as "Grading the Country Schools."

To secure the desired thoroughness and completeness, the instruction should be arranged into convenient divisions, each representing a stage of progress in the subjects suited to the age and advancement of the child. These divisions may be called "grades."

Grading is the dividing of the pupils' work into stages or degrees, and the classification of pupils according to such divisions, with the expectation that the ground of one division shall be covered before the conquest of the next is undertaken. In short, the "Gradation of Rural Schools," is but the practical application of a course of study to the daily work of a country school—the systematic, persistent following of a wisely devised curriculum.

That a regular scheme of classification and method of advancement is needed in our country schools, is admitted by all who are familiar with their condition. To secure the commencement of studies at their proper times, their successful prosecution, and the ultimate mastery of all the branches, is the spirit and purpose of grading.

Expedient Two—To Connect the Instruction and Progress of Successive Terms.

An education—even elementary—is the result of connected and supplementary labors. It is an intellectual structure whose parts are interdependent and mutually supporting. All the parts cannot be acquired at

one term, nor out of their natural and related order ; hence the necessity of a permanent plan for all of the terms, just as in the erection of a house the various parts must fit properly, and all the constructors—stone-masons, brick-layers, carpenters, painters—must conform to one plan.

The course of study, already advocated as “Expedient One,” is one means of supplying this need of connection between the successive terms.

Such course will show what is to be done term after term, and the order of subjects. But there must be some *record* to set forth the progress and present standing of each pupil. In other words, something to tell what part of the authorized course each pupil has mastered, and what part should receive his attention during the coming term.

Classification according to a plan for study, is an important factor in the improvement of rural schools, but the classification must be maintained until the Course is mastered by the pupil.

The work of each year is not to be considered as a thing complete in itself, but is a part of a continuous advancement toward completion.

This fact is well understood in college and city graded school work, but it is not appreciated in its relation to Country Schools as fully as it should be.

It is of little benefit to labor for the advancement of pupils at the present term, if such labor is not recognized, understood, and supplemented at the next term.

It is not enough to grade a school one year ; it must be kept graded.

The permanent authorized Course of Study is one instrumentality for securing these desired results.

Another, and an indispensable instrumentality, is a form of *record* by which the classification of the school can be held together from term to term.

Properly devised *registers* would do this, for they would show the standing of each pupil, disclose to the new teacher what pupils are deserting studies that are not their favorites, and also, what pupils have attempted to promote themselves. Such *registers* should record a list of classes, names of textbooks used in each, the pages at which the class began and closed the work of the term, together with such information as may be necessary to explain the work ; and the stage of advancement of each pupil at the close of the term. The filling of these registers should be required of teachers at the close of the term, or when their connection with the school terminates.

If such registers are prepared in a form to be preserved through a series of years, their usefulness will be increased.

This feature of school management is more important than many persons, at first sight, think. In some form it is already employed in the case of city graded schools. It should be applied to all Country Schools.

Expedient Three—To Bring Similarity into all the Schools,

The American people are not noted for abiding long in one place. Few persons spend their days in the locality of their birth or first residence. Children are moved from district to district, and do not finish their schooling in the house where it was commenced. To overcome the disadvantages incurred, the facilities and management should be the same in all districts. All efforts should be toward the same ideal.

If the pupils do not change their residences, the teachers more often change the places of their labors. This presents another reason for *similarity*, more especially in the class of schools under consideration, where change of teachers is more a characteristic feature than in any other classes of schools.

There is still a greater reason than these just mentioned.

Our public schools should deal out equal advantages to all the children; giving to each child the same intellectual privileges, no matter what the accident of his residence.

To accomplish this end there must be not only the same scope of instruction attempted, but the books in the hands of the pupils must be the same kinds, and the apparatus and other appliances must be alike.

While uniformity of textbooks is essential for the best results in the individual school, the benefit will be increased in proportion as the uniformity is extended over greater territory. Uniformity in the school is essential; uniformity in the township is a greater convenience, and uniformity extended to the county doubles the convenience.

All the other facilities of the schools should be similar. The same maps, charts, dictionaries, and other appliances should be in the schools. *

The same attention to the comfort and health of the pupils should be given in all the schoolhouses.

To secure these ends there should be a closer organization of the Country Schools, collecting the scattered fragments of these schools into a united system, that each one may be invigorated and improved by the strength derived from the whole.

The township plan—that is, considering the township as the corporate unit—is greatly to be preferred to the separate district plan.

A County Board of Education would do much for the improvement of the Country Schools in securing uniformity in practices, similarity in facilities, and permanency in purposes; and, if clothed with proper authority, could check much wasteful or corrupt expenditure.

Expedient Four—To Induce Pupils to Complete the Curriculum.

The extent and details of the instruction being defined, the work of successive terms connected upon a continuous plan, and the several schools

of a county, or at least of a township, brought to enjoy similar facilities—there now naturally follows a proper completion of the work so marked out; some means of inducing pupils to undertake and complete the Course of Study.

It was believed that great benefit would come, in many ways, by making such accomplishment of the course an honorable object in the minds of the pupils; that the commendatory recognition of creditable completion of the line of study laid down, would be an incentive to diligence, the influence of which would be felt in other classes as well as in the one immediately interested.

Experience has justified that expectation.

In the effort to make the pupil's progress continuous and systematic to the completion of all the branches prescribed for the common school, it soon becomes apparent that great help would be derived from the institution of some standard, the attainment to which would mark the pupil's accomplishment of the work he should do before he can claim that he has received from the school of his district the full elementary education that such schools are intended to give.

The pupil who has pursued systematically the curriculum prescribed for Country Schools, or who has mastered all the branches in such a course, is entitled to some recognition of his perseverance and achievements. Some form of recognition of the completion of prescribed tasks has been found to produce great benefits in other departments of educational effort. The promotions and graduations at colleges and high schools are known to exert a great influence upon their students. How much more is such an influence needed in Country Schools, where so many unfavorable influences are at work to interrupt the child's attendance, to shorten his stay, and to discourage his ambition!

The completion of a successful study of the branches named in the law and deemed essential for every citizen, is certainly an event in the scholastic career of the child of sufficient importance to justify some public recognition.

With these thoughts in mind, there has been established in Indiana, a special examination with an appropriate "certificate of proficiency" to the pupil who passes such examination in a satisfactory manner.

The examination should be upon questions given by some person other than the teacher of any pupil under examination; and the evidences of knowledge should be judged by some authority higher than the teacher. In states having County Superintendents, such official would be the proper person to give questions and to judge pupils' answers.

The standard of scholarship in these examinations should not be less than that required for admittance to the best high school in the county; and, the "certificate" might be made a passport to the high schools.

The examinations could be conducted at such times as to permit the successful aspirants to receive their "certificates of proficiency" on the last days of their school terms.

The presentation of the "certificates" can be made the occasion of some public display—a miniature commencement with its "Diploma presentation" and other exercises—thus increasing the value of this expedient, by making the attainment more noteworthy and honorable, and by enlisting the interest of the community.

In these four expedients is presented a brief outline of the principal features of the plan followed in Indiana for the improvement of the Country Schools. The following is a statement of the

Details of the Indiana Plan as Exemplified in Wayne County.

AIMS.

1. To define the scope and details of the Instruction in our Common Schools.

Means.

1. The adopted Course of Instruction.
2. Grading as the practical application of the Course.
3. The Manual.
4. Explanations and discussions at Institutes.

2. To connect the Instruction and Progress of successive terms.

Means.

1. The Course of Instruction.
2. The Records of classification and advancement in the Registers.

3. To bring *Similarity* into all the schools.

Means.

1. The County Board.
2. Uniformity of textbooks.
3. Uniform Course of Study.
4. General Rules and Regulations.
5. Form of Teacher's Contract.
6. Similarity in apparatus and facilities.
7. Legislation of County Board.
8. Same methods of teaching.
9. Model Program.
10. Institutes—Township and County.
11. Visitation.
12. The Manual.

4. To induce pupils to *complete* the Course.

Means.

Diploma—granted upon evidences of proficiency in the eight common branches.

12—SUPP. INST.

VII.—COUNTRY SCHOOLS—SPECIAL CONDITIONS.

BY GEORGE F. FELTS, SUPERINTENDENT ALLEN COUNTY, INDIANA.

The old adage, "As the teacher is, so is the school," is, I think, entitled to some qualification. It is, of course, true that the condition of our schools, particularly our country schools, depends very largely upon the efficiency of our teachers. But in order to make true teaching possible, certain conditions must exist, certain forces must co-operate, otherwise the teacher may be a Wickersham, a Parker, or an Arnold, and yet the school may be only partially successful.

In the few moments allotted me, I shall speak briefly of needs, aside from the teacher, that have been suggested by conditions in some of our country schools.

A state has indeed done much for its children when it has formulated a system of free education, but it has done much more when it has placed the system in complete working order. To accomplish this there is, in the first place, a need of authoritative direction. The present unorganized condition of many country schools suggests the need of a superintending or a directing agency, so distributed that the most isolated districts may feel its influence and obey its mandates.

The present high standard and efficiency of the city schools is due, very largely, to the manner in which their work is directed. Here a superintendent who has method in his labor and who knows the value of system, has the authority to direct every department, and makes good work, on the part of the teacher, possible if not easy.

Unfortunately the need of careful supervision has not been so generally recognized in the country, and schools are usually good or bad in proportion as they have had this directing agency.

It is erroneous to suppose that careful supervision can raise the country school to the standard of the city. This is not expected, however much it may be desired. On account of natural advantages, too apparent to need mention, city schools will always be able to accomplish much that cannot be undertaken in the country. However, the great desideratum of the country schools to-day is not more work, but better work, and herein lies one of the chief benefits of supervision.

The condition of country schools suggests as a second great need, and one that careful supervision will do much to supply, the better adaptation

of the work of the school to the wants of the pupils. Our common school branches are an accumulation of a century; an accumulation rather than a growth, and it is not unnatural to suppose that the arrangement of much of the subject matter should not be in accord with the laws of mental development. The proper division of subjects of study, or the process of differentiation, now going on, will enable those whose business it is to arrange a curriculum for country schools, to give especial prominence to the more important matter of the textbooks, while much that is of less importance may be eliminated.

The arrangement of a course of study to meet the requirements of pupils is very important at all times, but it is of the very highest importance for the earlier years of a child's school life. It is said that the future of our primary schools is the future of the Republic. Our best city schools seem to recognize this as truth, and have thoroughly equipped their primary departments and are there doing their most skillful work. The fact that a much lower estimate should be placed upon primary work in many country schools, is deplorable. Boys and girls in the country are as bright and as willing to work as are those in the city, but they do not find the work to do. I dare say many of us know of schools in which primary pupils are called upon to read or to spell two or three times a day, and are left to idle away the rest of the time, or to con over textbooks that they can neither appreciate nor understand. Many children in the country are out of school to-day simply because there was absolutely nothing in their primary work to interest them or to lead them on to higher things. This has always been our weak point. If we would remedy it, we must do much more and much better work in the primary grades. When we have done this, we shall find our schools regular in attendance; in a few years they will be well graded, and pupils will remain in school until they have finished the course of study.

Then there should follow on the part of teachers and school officers, a proper recognition of the pupil's advancement. Gradation necessarily carries with it the idea of completion. Hence if a school be well graded, there must be a time for completing the work of each grade, and consequently a time for completing the entire course. When children in the country have done this they are as much entitled to an honorable recognition of their attainments as are those in the city. To deny them this is to withhold from them a most powerful and healthy stimulus to exertion. Careful examination, followed by appropriate graduating exercises, should be the crowning feature of each year's work in country as well as in city schools. Country school graduation is no longer an experiment. It has been tried and has the indorsement of many in high places. Some of our State Superintendents are urging it, and it will sooner or later become a feature of every school system.

The condition of much of our school property suggests the last topic of my paper, the importance of well-kept schoolhouses and grounds. Many do not appreciate, perhaps some do not know, the value of this as an educational influence. If school boards, or those having the authority, would lighten the burden of teaching one-half, let them make everything about the school beautiful and attractive. This will have an elevating and refining influence, and there will be little need of any other discipline; then the teacher can devote more time to teaching and less to government. Children, as a rule, have many teachers. Everything they see or hear makes its impression and goes to form character. If, therefore, we would have them form correct tastes and habits, we cannot be too careful of their surroundings.

Our country schools are particularly in need of better kept schoolhouses and grounds. It is not necessary that we expend a great deal of money, for it is not the expensiveness, but the neatness and good order that makes the valuable impression on the child's mind. Neither should we wait until we have new houses, but should begin at once to embellish the old. The ordinary house, cheap though it be, may be suitably adorned. Its surroundings may be made orderly and attractive, and the pupils may thereby be made careful, obedient, and attentive. Children cannot all have beautiful homes. A beautiful home, either in city or country, must necessarily be expensive. But there is no community that cannot afford a beautiful school. If there is no better way to provide it, let the people begin by spending one or two days in each year in planting trees and shrubbery, in making walks, in painting, in doing anything and everything that will make the place beautiful. When this is done the school will no longer engender the rude and repulsive in the child.

It is no uncommon thing to find our State-houses, court-houses, and jails ornate and expensive; yet the school, the place that should be the center of all that is elevating and refining, is left in disorder and neglect. If I had it in my power I should make the country school the most beautiful place in every neighborhood. It should no longer be a prison, but a palace—fit place for the development of mind.

*VIII.—SUMMARY: AIMS, LIMITATIONS, SUBJECT-MATTER,
METHODS, RESULTS.*

BY LEROY D. BROWN, OF OHIO.

In the brief time assigned for this discussion, it will not be possible to present a complete and logical consideration of the aims, the limitations, the subject-matter, the methods, and the results of common school education. But fortunately the wide scope and the excellent quality of the papers already presented make such a consideration unnecessary. This summary will therefore contain only a compact statement of the positions taken, or established in the papers, with such additional presentation of facts and principles as may be deemed essential to a comprehensive view of the topics under consideration.

Professor Bartholomew has, in his very clear and admirable historical sketch, made us familiar with the bases, the purposes, and the relative values of educational systems in many countries of ancient, mediæval, and modern times. He has demonstrated that the best system of education for one country is not necessarily the best system for all other countries, and that the ideally best system of education for any country must be the result of evolution under the conditions of free government. He has clearly shown that the purpose of the American common school is to aid the family and the State in the preparation of all the youth for citizenship. He has confirmed us in the opinion that the unsymmetrical development of the child's powers produces results alike disastrous to the individual and the community. He believes that common schools originated with Christianity and that the prosperity of the American Republic depends greatly upon these schools. Professor Bartholomew's paper thus forms a fitting introduction to the discussions to follow.

Miss Warr properly attached great importance to the external necessities of the common school system. She showed the great need of an ample and secure financial basis for the support of common schools, and put in a strong plea for the best schoolhouses.

Miss Rounds, like Pestalozzi and Froebel, has called our attention to the fundamental truths and the common errors in teaching. This she has done in language so well chosen as to make her paper a most valuable contribution to the literature of our profession.

Superintendent James found no use for teacher or school until the child

has arrived at the age of four years. The kindergarten be recommended for children between four and six. This was to be followed by elementary and the high school. In elementary schools the methods of the kindergarten were to be observed in teaching the youngest pupils, and in the high school industrial training was recommended. In all elementary instruction, language teaching was of the greatest importance, and the only safe limit to the extent of the common school curriculum was the financial ability of the community.

Miss Phillips continued the discussion on "A Course of Study." She found experience to be the main source of guidance toward the truth, but she strongly insisted upon the study of psychology by all who would teach. Subjects should be presented to the child in the order of his development and all instruction should be adapted to the individual.

In presenting the subject of Country Schools, Superintendent MacPherson called attention to four necessary expedients, the first relating to the scope of the course of study, the second, to the pursuit of this course in a systematic manner, the third, to uniform work, and the fourth, to means by which pupils may be induced to complete the curriculum. The masterly treatment of his topic places this department under obligations to Superintendent MacPherson.

Superintendent Felts continued the discussion and showed that the "Indiana idea" of county supervision is uniformly successful throughout the state.

And now, Mr. President, having consumed my time in thus imperfectly presenting a summary of this well planned symposiac system, I shall leave for those who are to continue the discussion the treatment of the questions yet untouched. This I do with the hope that at the conclusion of these July festivities, "good digestion may wait on appetite, and health on both."

IX.—GENERAL DISCUSSION.

BY MISS IDA JOE BROOKS, OF ARKANSAS.

The first paper being an historical sketch, admits of no independence of view.

The height of the school building is a question which should receive the attention of teachers and school officers. Much injury is done growing children by the neglect of this matter. Great attention should be given to the size and shape of the schoolroom and to the lighting of the room. I cannot agree with the lady in her dislike to public exhibitions of the schools. The desire to win the approbation of relatives and friends is a powerful incentive to exertion. Could we induce the parents to visit the schools frequently we might dispense with the public entertainments,—otherwise, we cannot. Perhaps the most important consideration in the constitution of the board of directors is that politics should be entirely overlooked.

If the manual training school be carried on during the vacation months we give it cordial welcome into the public school system, but we cannot consent to weaken the course or lower the standard in order to include this outside work.

During the reading of the fourth paper, we listened in vain for the magic word *Geometry*. Plato was once asked, "What does God do in his leisure moments?" He replied at once, "He geometrizes." Certainly nothing soars so high as pure geometry, and nothing is so practical as applied geometry. I venture to assert that better discipline and more practical results will be obtained from the study of practical geometry in the years between ten and fourteen in any child's life than can be obtained from the same time spent in the study of Arithmetic.

One of the errors of the time is the effort that is being made toward speedy fruition. The processes of nature are slow. Some one has aptly said, "It takes time to make a man." A child has a natural craving for knowledge, but should not be left without proper guidance in its reading. Who can estimate the benefit to those children who have pursued through this period of penetrative imagination a course of reading selected by their teachers and supervised by their parents? Does the lady intend to convey the idea that faith begins where reason ends? To be sure faith goes beyond reason. The Great Teacher said—"Take my yoke upon you."

But faith is as surely an attribute of the human mind as is imagination. "In this mocking world *too* soon the doubting fiend o'ertakes our youth." The inquiring youth is safe, the youthful doubter is in danger. I heartily endorse the sentiment in regard to the broad missionary field. A wealthy and remarkably successful business woman assured me not long since, that the cause of the recent troubles with the strikes was the "education of the masses." To judge from some recitations we would be apt to agree with the writer who says that words were given us to conceal our thoughts, rather than accept the statement quoted that "speech created thought."

The expedients for the improvement of the country schools are good. The theory is excellent, but when we seek to apply it to all country schools in all states we find many difficulties. The writer assumes that the condition and needs of country schools are the same and are known to all teachers. Even the matter of uniformity of textbooks is one which must be settled by the purse of the father oftener than by the wishes of the teacher. Any teacher may prepare an interesting program for the close of school, and perhaps succeed in interesting the parents in their children. How easy it would be to teach school did we receive the children with minds and souls like unwritten sheets of paper, upon which we could inscribe only the true and beautiful. But how perplexing the task when they come to us a bundle of nerves, eccentricities, and hereditary traits. We must do our best, remembering that the faithful are the successful and that the reward is assured to those who endure to the end.

BY T. O. HUTCHINSON, OF OREGON.

Children ought to be encouraged to take a great deal of exercise, when young, to develop their bodies. If girls would take more exercise while little children, there would be fewer to complain, when grown to womanhood, of being physically unable to climb the stairs into our tall school-houses.

Let the girls romp! Do not be afraid that they may be thought rude. Better be thought rude than to lack proper physical development. Exercise develops the bodies as study develops the minds. It will not do to go to extremes, however, and I believe with the lady who preceded me, that our schoolhouses ought not to be so constructed as to compel any child to over-exert herself. A little girl of delicate organization should not be compelled to do more than her fragile body can bear. Neither ought ironclad rules be made and strictly enforced without regard to the powers and ability of the pupil. This last remark is not only applicable to the matter of taking exercise, but in other things also. For instance:—A gentleman in this place told me, a day or two ago, that his

little girl's eyes had been injured by sickness, and she, being timid, did not inform her teacher of her defect, but in her reading class held her book, according to regulations, fifteen inches from the eye, where she could not see a letter. To do this she was obliged to commit her lesson to memory and actually recite it, instead of reading it. Her father hearing her repeating her reading lessons to her aunt, questioned her and found out the hardship she was compelled to undergo, and wrote to her teacher requesting a change to be made in her favor.

I once heard of a woman, who, to harden her babies, used to dip them into ice water. The result was the death of two or three of them. But while we should be careful not to overdo matters, we ought to require our pupils to take enough of rugged exercise to secure that happy balance of physical and mental development, so necessary to a complete education.

PROCEEDINGS
AND
ADDRESSES
OF THE
DEPARTMENT OF MUSIC.

DEPARTMENT OF MUSIC.

TOPEKA, KANSAS, July 13, 1886.

Minutes of Department of Music, N. E. A.

Meeting called to order. Vice President Westcott of Chicago, Illinois, in the chair.

On motion, Mr. Herbert Griggs of Denver, Colorado, was elected Secretary *pro tem*.

Mr. Holt called to the chair during the reading of paper by Vice President Westcott, on Music in the Public High School. Subject opened for discussion.

Mr. N. Coe Stewart, Cleveland: It is assumed that High School pupils are beginners. They are not. There comes a time when a point should be left, even if not conquered. Absolute pitch controversy should be done away with. We are coming to a time when the regular teacher shall be competent to teach music.

[Mr. Aaron Gove, Superintendent, Denver, Colorado: We want to know more how to manage the music in the High School when music plans have been often changed. When pupils come in from lower grades and when they come from other schools.

Mr. Seward, N. J.: The only way out of the problem is to take the "tonic sol-fa" system. Music has two sides, art and language, also two sides from another aspect, instrumental and vocal. Eight keys for the instrumental and but one for the vocal. The "tonic sol-fa" is more a philosophical than a mere child's system.

Mr. Holt, Boston, Massachusetts: All teachers know that the easiest place to teach music is in the primary grade, the most difficult in the high school. Music in the schools must be a growth. The trouble is, the high school pupils have not had the proper training from the bottom up. They must *think* the sound before they see the representation. Pupils at present find themselves in the high schools without preparation or ability to sing music that is appropriate for the grade.

Paper: What the average teacher can do in musical instruction, by Sara L. Dunning, Malone, New York.

Subject opened for discussion.

Mr. Collins: Pupils fail because they have not daily practice and intelligent teachers. If pupils were kept within their register, they would always sing. Teachers must co-operate heartily with principal.

Mr. N. Coe Stewart: The hope of the country in music is in the average teacher.

Mr. Prague, Racine, Wisconsin: Our city has produced no results. Have been singing by rote.

On motion. Appointment of committees postponed until the following day. Programme for Friday will be carried out Thursday.

Meeting adjourned.

SECOND SESSION.

TOPEKA, KANSAS, JULY 14, 1886.

Vice President Westcott in the chair.

Paper: What Music Instruction in Public Schools should be, by N. Coe Stewart.

Subject opened for discussion.

On motion, discussion of papers postponed until the reading of the following papers:

A New Notation or Better Teaching,—Which? by H. E. Holt, Boston, Massachusetts.

Tonic Sol-Fa Notation as a Factor in Musical Education, by T. F. Seward, New Jersey.

Subjects opened for discussion.

On motion, Mr. Seward made a presentation of the tonic sol-fa system.

Vice President Westcott appoints a committee on nominations, consisting of Mr. Holt, Mr. Seward, and Mr. Collins. At the request of Vice President, Mr. Howard, of Boston, addressed the meeting. He urged the importance of a broader effort on the part of the teachers. We are apt to think more of the system than of the results. True music education takes hold of the heart, mind, and soul. Knowledge of harmony is what the teacher most needs.

Mr. Collins (speaking of representation before the sound): You can present to the eye what you cannot to the ear. Impressions made on the eye can have an effect on the mind that it can never have if made on the ear.

Mr. Seward: After presenting an outline of the "tonic sol-fa" system said, I challenge the production of any one that has tried teaching the "tonic sol-fa" system faithfully and has given it up.

Miss Sara L. Dunning promptly accepts the above challenge and gives the names and places of several teachers.

Mr. Butler: If I have been successful in teaching music, it is because I have learned to teach other things first. I find some good points in all systems.

Mr. Sprague, Wisconsin: We have lost time in arguing about systems. I ask for the record of results.

Mr. Seward declines to act on committee of nominations. Mr. Sprague appointed.

Mrs. Lang: After three years' trial of the "tonic sol-fa" the singing is natural, the progress has been rapid, and the reading at sight good. This is due to the simplicity of the system.

Mr. Day, Cleveland: Teachers at first claimed that they could not teach singing, and did not like to try. This is now all changed, the teachers are having good success.

Mr. Griggs, Denver, Colorado: We have been using Mr. Holt's system in our schools, so far, with very good results. Teachers who at first were backward about teaching are now perfectly willing and even pleased that they are asked to teach music.

Mr. Guttery, Lansing: Have done away with a regular professional teacher, and we are now doing well with a director. We are using Mr. Holt's method.

Mr. Sli, Topeka: The pupils of Topeka are doing well, can sing at sight readily. We are using my own method.

On motion, committee on nominations will report at a called meeting on the following day.

HERBERT GRIGGS, Denver, Colorado.

Secretary, pro tem.

TOPEKA, KANSAS, July 16, 1886.

The Department of Music of the National Educational Association convened at the Congregational church, this P. M. Vice President, O. S. Westcott in the chair. In the absence of the Secretary, Professor H. E. Holt, of Boston, was appointed Secretary *pro tem*. The following report of the committee on nomination of officers was presented by the committee.

For President,—O. S. Westcott, Chicago.

For Vice Presidents,—N. Coe Stewart, Cleveland, Ohio, Herbert L. Griggs, Denver, Colorado.

Secretary,—Edgar O. Silver, Boston.

Executive Committee,—L. W. Mason, Boston, T. F. Seward, Brick Church, New York, O. Blackman, Chicago, S. A. Collins, Xenia, Ohio, B. Jepson, New Haven, Connecticut.

Auxiliary Committee of Ladies,—Mrs. Hershey Eddy, Chicago, Miss

Lizzie O. Stearns, Detroit, Michigan, Mrs. M. E. Brand, Madison, Wisconsin, Mrs. E. H. Chamberlain, Kalamazoo, Michigan, Miss Sara L. Dunning, Malone, New York, Miss O. B. Lee, Ballston, New York, Miss Emily Madden, Argyle, New York.

. Signed by { H. E. Holt,
 A. R. Sprague, Committee.
 S. A. Collins,

The report was accepted and adopted and the officers, as reported, were declared elected. Adjourned.

Signed,

H. E. Holt,
Secretary, pro tem.

MUSIC IN THE PUBLIC HIGH SCHOOL.

BY O. S. WESTCOTT, CHICAGO, ILL.

Lazily reclining in a hammock at ten o'clock of a bright June morning, with nothing to break the silence of the elm grove around me, but the chirp of a sparrow, the whistle of a distant bobolink, and the harsh note of a more distant crow, I am led to conclude that the music evolved from the chords of the human animal, to be satisfactory to the auditors, should also be natural.

Not that no training should be allowed to furnish an added charm to the graces of vocal music, but that culture should never lose sight of nature, and thus have degenerated into mere mechanicalness the use of the musical gift. It should be the enlightened and truthful boast of every teacher in every science, that his method will bestow the needed culture and the necessary training without destroying or at all repressing the individuality. The child and the youth do not need a re-fashioning of either themselves or their voices, but only a suggestive guidance, by which they may be taught to augment their powers, without ignoring such as they naturally possess.

All children should be taught to sing. This "all" is used with only such limitations as would be implied by some actual, physical defect. Idiocy, paralysis, or any physical or mental disability so far forth shut off the individual afflicted, from a full claim to brotherhood in humanity, and from any expectance in enjoying its privileges, or receiving rewards of merit for well-directed exertion.

I knew an uncultured boy, who, with the love of music deeply implanted in his soul, attended an old-fashioned New England singing school for two evenings. During the second evening, he was interviewed by the Professor, and informed that, as it was evident that he had neither voice nor ear for music, his room was thenceforward more desirable than his company. Indeed, this idea was insisted on, to the extent of his being told that he must stay away, or the school would close, since his uncouth and barbarous tones were destroying the happiness and peace of mind of all the others who were anxious to reap the benefits of the winter singing school. And with a sense of unjust treatment rankling in his soul, the young man retired with a determination to know the *science* of music at any rate, and the *art* to any extent possible. After an experience with

various musical instruments, and after attitudinizing as singing school teacher, piano-forte instructor, *et al.*, for some years, he has sometimes felt, if he could meet that itinerant, old-time professor, as if he would challenge him to some sort of a combat, musical or other, even if he ran the risk of being conquered and flayed alive for his presumption, as was Marsyas.

In these days we profess to be more enlightened, and yet within two years I have seen many pupils dismissed from a singing class in a high school, because they had never sung. Suppose a teacher were professing to be starting an algebra class, and, having inquired what pupils had previously pursued this branch of mathematics, should conclude by dismissing all who were admittedly ignorant of the subject.

Too many teachers like to pose as *educators* rather than as *instructors*. They are willing to draw out whatever information the pupils have previously obtained from other sources, but exceedingly loth to expend the exertion requisite to building up the pupil by adding to the stock of knowledge already possessed.

But what is the object of vocal music as taught in public schools? Is the subject *educational*, or *recreative*, or *both*? And in the high school, which of these probable designs should take the precedence? In answer to this question, there will doubtless be developed a wide difference of opinion.

While it would seem, at first sight, that all time spent in school should be so employed as to give a resultant of positive intellectual growth, it is evident, that in the matter of vocal music, many good results are attainable, even if the question of mental improvement is kept to some extent in the background. The enlivening, invigorating effects of a cheerful song, even if learned by rote and sung with no scientific knowledge of written music, can hardly be over-estimated. And with the curricula of the public high schools so extensive as they now are, it would seem as if the recreative bias, which might be given to vocal music in the high schools, would be a desirable one.

The difficulty, unfortunately, is, that the teacher who is inclined in this direction, is too likely to be entirely neglectful of the matter of scientific training. Of the two, however, the over-scientific instructor is frequently the more objectionable. He plunges at once into the intricacies of the subject and at once disgusts and discourages all who are not favored with outside instruction.

I have known one of these scientific instructors puzzle a class of beginners at their *second* lesson, with the peculiarities of the melodic minor scale, and at the *third* lesson—a week later—become positively enraged, because they could not sing on call both major and minor triads on any tone as assigned. Perhaps if he had inculcated and allowed the use of

the syllables, he might have obtained some results, but as they were excluded—on theory—and C, E, G, C. E flat, G, D, F sharp, A, D, F, A, etc., were the cabalistic directions, the results were as unsatisfactory as ought to have been expected. Less musical knowledge and more genius for instruction would certainly have redounded to the advantage of the learners.

One cannot well understand why any less teaching faculty, any less versatility is desirable in a teacher of music than in a teacher of anything else. The teacher of language, the teacher of mathematics, the teacher of science avails himself of every device. If a pupil's mind seems to be unapproachable from one quarter, the assault is renewed at another point; if one illustration seems to fall on unheeding ears, another is at hand provided for just such an emergency. Why should the work in music be any less ingenious? Why does the man who professedly believes in teaching the absolute pitch of tones, feel disposed to spend a deal of time insisting that a person shall learn to distinguish a certain tone as A? He can much more easily orient himself with a pitch pipe or a tuning fork, and in course of time, perhaps, educate his *innocent* ear up to a pitch of appreciation.

No doubt Theodore Thomas believes in absolute pitch, but it goes without saying that he would never dare to allow any two of his best first violinists to appear and play publicly in his orchestra, each having previously (and privately) tuned his violin to the best of his judgment. Suppose his entire orchestra were set at work with only that kind of preparation for consonance on a given pitch. Can one even imagine the result? Chinese orchestras would be eclipsed indeed.

Little, if any, more practical, or more truly a teacher is the one who insists that, admitting the use of the syllables he must apply them strictly only in the key of C. *D must be re*, and *F must be mi*, at any and at all times, though the heavens fall. And the "*movable do*" man is no better when he insists that the tonic sol-fa is but a machination of the evil one, and that its adherents are only biding their time to sweep the last vestige of the staff notation from the face of the earth.

Such statements seem puerile and ridiculous, and, indeed, are but a confession of weakness on the part of the radical opponents of the tonic sol-fa notation. The latter is confessedly the simpler. Why not follow substantially the advice of the apostle in another matter? "Refrain from these men and let them alone, for if this counsel or this work be of men, it will come to naught. But if it be of God, ye cannot overthrow it, lest haply ye be found even to fight against God." In case the pupil finds it difficult to grasp what to him at least are complexities in the staff notation, why not provide for him the milk, which some babes need as anticipatory of the strong meat, to which they are yet both unaccustomed and unadapted?

Nor need the tonic sol-fa men be unreasonable. If minds are able at once to grasp the staff notation, why need they be repressed by the teacher's insisting upon their making use of something simpler? Time will come when they must know the staff notation, and it is just as unnecessary and disagreeable for some to be held back from the instruction they crave, as it is for others to be hurried along too fast for their apprehension. Here as in all other cases, *the judgment of the teacher* should determine.

Had not the music teachers themselves indulged in a great deal of unnecessary discussion on these matters, neither the school authorities nor the school patrons would have ever deemed it worth while to interfere with the instruction of whatever kind. *They are after results, not methods.* And, as already substantially observed, the true teacher will never be so wedded to one method, as to be unwilling to try another, when, as often happens, his own, in particular instances, is but a lamentable failure.

When the young man above mentioned, who was unceremoniously compelled to part company with his friends in the New England singing school, began his work on the organ, without an instructor, without an instruction book, he soon discovered the to him novel, but interesting fact, that the Psalm tunes in the old "*Carmina Sacra*," notwithstanding their varied effects, had many points of similarity. The common chord, the chord of the dominant, of the subdominant, of the 7th, of the 7th and 9th, etc., were all separate existences to him, though as yet innominate; he knew when to expect the *authentic* or the *imperfect* or the *plagal* cadence, and how certain chords were resolved. If, however, he had been called upon to explain any of this self-acquired knowledge, he would have been covered with shame and confusion, as he had somehow gotten the impression, that instrumental musicians talked in a sort of a dialect that he did not comprehend, and he did not wish to be ridiculed for his *do-mi-sol* and *do-fa-la* and *sol-si-re-fa* chords as he knew them. He knew only the syllables, and certain of their combinations which he had empirically proven, but the conversations of the musical people were to him a veritable sealed book, as he was not of the elect, and had even been driven away from the crumbs which fell from the table. In using a flute, he found himself gradually leaning upon his slowly-acquired knowledge of the position of the letters above the soprano staff, until his present frame of mind in reading is a combination of syllables, letters, and relative position and which of these thoughts takes general precedence, or at what point one of them is taken up as another is abandoned, it is impossible for him to say. And yet there is a certain satisfaction in having acquired even this sort of knowledge in spite of opposition, and in spite of the needless laboriousness of the method.

If I had the appointment of a special Teacher of Music for high schools, I should insist upon a few things. He must be a lover of the art. He

must not be a mere mechanician, able to execute difficult passages, a vocal gymnast so to speak, but he must have sensibilities affected by music, a soul appreciative of results, as well as a mentality appreciative of methods. And yet, he must have a self-control which will prevent an undue exaltation away from the matter in hand.

The reception and execution of musical thought involve organs physical as well as faculties intellectual. The former must be controlled, and until the instruction in that direction is well advanced, it is useless for a teacher to be striving for what he calls *effects*.

I have known a music teacher to become so carried away by his feelings as to be unwittingly changing his *tempo* constantly, an *accelerando* here, an *ad lib.* there, and that with a class of poor readers, perfectly unfamiliar with the music. The drudgery must be first done, that the finished work may be at all satisfactory. It may be that in this and similar cases, there is too much musical sympathy, too much musical knowledge even, with too little genius for instruction. Good instruction in music and in reading should deal with many minds, just as many times we feel obliged to deal with drunken or with crazy persons. The intended result should not be kept before the learner's mind too constantly. It may even be kept entirely in the background. This disposition to conquer by delay is not common. It would appear that the *Fabius Cunctator* of the musical war is yet to be born. It certainly is not either of the present champions of the rival schools.

The music master with soul susceptible to the influences of music, must also be a lover of children. The one perhaps almost implies the other. An inclination to take charge of any department in a school or system of schools should imply this liking, and a disposition toward instructing in music surely not less than in any other branch of science.

He must be thoroughly familiar with his *native English language*. In his speech and in his directions to his pupils he must be willing to conform to the usages of the best writers and speakers.

In matters of pronunciation he must be willing to conform to the standard dictionaries. It is entirely unnecessary for him to have the pupils sing *wind* when the other teachers of the high school in other fields uniformly say *wind*. This practice is only a curious instance of how the reason may be overridden by whim, and the force of habit. All music teachers agree—so far as I am aware—that simple vowel sounds are more easily sung than diphthongal ones, and hence, that when possible, it is desirable to avoid these latter. Why do they never apply their *dictum* to this case? *Wind* has a simple vowel sound, *wind* has a diphthongal one. A certain amount of drill is necessary to overcome the tendency on the part of comparatively inexperienced vocal musicians to putting their force and time upon the vanish of this diphthongal sound. They must be long

and patiently drilled before they are willing to dwell upon the Italian *A* through the indicated time, and close with the briefest possible vanish. But, then, says the music master, we have that *glorious Italian A*. So we do, more's the pity, unless the Italian *A* is in the right place. Between the music masters and the travelling—shall I say—elocutionists, the language is in a fair way to lose some of its present vowel sounds.

Fellow sufferers! are you not tired of having even the pure Italian *A* presented too frequently for your contemplation?

Is it possible that you admire

“Up from the meadows rich with corn,
Clear in the cool September morn,
The clustered spires of Frederick ständ,
Green-walled by the hills of Maryland”?

And how can you reverentially sing Handel's magnificent solo in “Israel in Egypt,” by addressing Jehovah with the words:—

“Thou didst blow with the wind”?

Let me repeat: The high school music instructor must know English and be willing to use it.

The high school music teacher should be an *Instructor* rather than an *Educator*. This is not intended as an original remark, or as one limited in its application to the *music* teacher. The opportunities for neglect, however, are much greater here than in many other directions. A shabby, servile dependence upon the few pupils of a class who are favored with outside private instruction is possible in a school music-class, and does exist. There should be a disposition to work for the improvement of the greatest number. With this thought in mind, the music teacher never comes to his class without previous special reflection in reference to that exercise. A well-digested plan of action is a necessity, and a tangible or rather audible result is necessary. Without this definite result at each exercise, the class loses interest. Its numbers diminish, or if the class is held together by virtue of compulsion, its members lose respect for the leader, and inattention and still less success are the invariable and immediate consequences. This previous preparation will imply also that the instructor comes with a supply of fresh material. The ditties which are palatable to the child of the primary grades, have lost their savor for the high school pupil. The refrain of *fa, la, la*, or *tra, la, la*, are almost as nauseating as the “too-ral-li-loo-ral,” etc., of Villikins and his Dinah, and the thoughtful youth of the high schools should be relieved of such make-shifts.

The music teacher must be *good natured*. One must have studied psychology to little purpose, if he imagines that any ill-natured person can be a good instructor. But the close contact of the music teacher with

children makes it *more than usually* imperative that *his* attitude toward his class should be that of loving good-nature.

A namby-pamby superficial imitation of the genuine article will not do. The eyes of children pierce with promptitude such gauzy coverings, and their affections are not warmed, their hearts stirred, or their souls expanded by musical drill at the hands of Prof. Squeers, of Dotheboys' Hall, even in his blandest moments.

There are two classes of things, it would be well, if music teachers, as well as other people, would agree to cease fretting about; things that they *can't* help, and things that they *can* help. They can't help it that school officers will not always make music in schools a *required* rather than an *optional* study: they can't help it that boys' voices are changing, just at the time when they have to deal with them in school. Not only should such unavoidable things be endured with equanimity, but plans should be laid, and schemes devised and carried out, in such a way as best to combat these and other unfortunate concomitants of the business. It will doubtless some day dawn upon the school authorities, that the present graded schools are not beyond criticism, and possibly, long before the millennium, we shall solve several vexatious problems by having an interregnum in the child's school education, which will give him special physical exercise and manual training, untrammelled by books, from,—say the twelfth to the sixteenth year of his age, and thus this physiologico-musical problem will be settled to the satisfaction of musical instructors, and without their labor or intervention.

Give us, then, instructors with musical talent; instructors educated in English; instructors with hearts and souls open to the divine influences of music; instructors who love their work and their pupils; instructors with unswerving fixity of purpose; instructors willing to utilize the good of all methods; instructors self-poised, honest in their efforts, ambitious to advance beyond primary work, free from vacillating belief in musical theories, invincibly good-natured, and willing to yield gracefully to the disagreeable necessities of the situation, and we are well along on the high road to success.

The high school singing class is pre-eminently the high school singing teacher.

WHAT THE AVERAGE TEACHER CAN DO IN MUSICAL INSTRUCTION.

BY SARA L. DUNNING, MALONE, NEW YORK.

By the mouth of many witnesses the truth that the average teacher *can* do most valuable work in musical instruction. will, I hope, be established.

I am thankful for such a National Association as this, and for the state and county associations of our land. I am thankful for the pedagogical literature that has come down to us, and is springing up anew around us. But I am *most* thankful that the day has come when not only our great-minded educators but the average teachers throughout our country are attending these associations, and both inside and outside the Teachers' Reading Circles are thoughtfully and earnestly studying this literature and seeking to lift themselves above the position of mere artisans to that of *artists* in this most noble of all work — teaching.

Sully says: "We call any department of practice an art when the actions involved are of sufficient complexity and difficulty to demand special study, and to offer scope for individual skill." Thus we hear now of the art of cooking, the art of surgery, the art of engineering, the arts of agriculture and even of politics; the mechanical arts, the healing art, the legal art,—so we have come to have the art of teaching. Indeed, as has been said, "Teaching is not only one of the fine arts, it is the *finest* of arts. No other is comparable with it. All other arts deal with lifeless matter. Teaching has to do with the living soul. All other arts are perishable. This is for eternity."

While there is probably no larger proportion of our teachers who are *musical* to-day than were so ten years ago, there is a far larger proportion who are good *teachers*. Herein is our cause for rejoicing. The way is at last clear for us to become a nation of singers, and, thereby, improved intellectually, morally, and physically.

President Robinson, of Brown University, says, "Persons who deal with music, whether as composers or teachers of it, are real benefactors of humanity."

Hamerton says, in his "Intellectual Life," "Music has an important influence upon expression of all kinds. No painter, writer, or orator who had the power and judgment of a thoroughly cultivated musician could sin against the broad principles of taste." Is it then, beneath the best

effort of the best teacher to study this art, and the art of teaching it to others?

It has been clearly shown that no one study cultivates more of the powers of the mind than does music. The element of pleasure enters so largely into it that the little ones do not think of it as work or study, but only as amusement or recreation. Some of my teachers have said as I enter their rooms, "Now how many would rather sing than keep on with their work." Immediately a perfect swarm of quivering digits are in the air, a smile on every face, and as the sound of their sweet voices fills the room, they little suspect that *the development of their mental faculties* is the primary object of the teacher in giving them this much-loved, restful exercise.

Right here I want to say, that to both teacher and pupil, the enjoyment of the work will be keen in proportion to the degree of intelligence with which the pupils learn to sing. While rote singing may, occasionally, serve a useful purpose as a means of recreation to the youngest pupils, it is nevertheless encouraging to see how much greater pleasure it gives even to the smallest children to read their music from the chart or book than it does to learn the tune, one line at a time, from the lips of the teacher. Besides this objection to rote singing there is another in the fact that many teachers would really be unable to do the work if music must be taught in this way. But taught in the proper manner, i. e. as every other subject should be taught, according to *true educational principles*, much added delight is given to the child and real relief to the unmusical teacher.

My heart is full of sympathy for the faithful, earnest, over-worked teachers of our land who tremblingly shrink from the thought that the time is surely coming when they will have to add music to their other work. It is always darkest just before dawn, and when the sunlight of music once gets into their schoolrooms they will wonder how they ever got along without it. This has been the invariable experience of all, so far as my knowledge has extended.

In the town with which I am best acquainted, there was not one in twenty of the teachers who considered herself, or would be considered, especially musical. Several insisted that they did not sing at all, and that they could not sing, but like most other teachers in similar situations, found that not only could they themselves sing but they could very acceptably teach other people to do so. All have done good work in music, and some of the least musical have excelled those whom all considered their superiors in this respect. Indeed it may be set down as a fact that in teaching the rudiments of music to little children *better* work is sometimes done by those who have little knowledge of it than by fine musicians who have no teaching ability. I trust I may not be misunder-

stood and accused of putting a premium on ignorance. Far from it. The teacher will, as we so often hear, "Learn to do by doing." His province is to guide the pupils in their practice of thinking sounds and not to do their thinking for them.

Many teachers themselves believe that in order to teach music in school they must be fine singers, but this is not necessary. If one must needs know all of a subject before teaching its rudiments we should never have any teaching in any subject. "The more we know of our subject the better we can present it to others" is very true, provided we have learned the art of presentation.

One teacher has said to me, "When I engaged to take this school the music was a great terror to me; I knew I could do the other work, and I *thought I knew* I could *not* do that; now I would not want to teach if I could not have music."

Another says, "I feel as if I ought to allow the Board a certain per cent. of my salary for the instruction I have received from my children, while they think I have been teaching them."

Still another says: "Since I seem to have succeeded in teaching the children to read music I am sure any one can do so, for certainly no one can know less than I did when I began the work."

A fourth says: "I did dread the music so, but now I would more willingly give up any exercise."

One lady who was not musical, but was a fine teacher of other branches wrote me: "Teachers will find out for themselves when they make the experiment that they *can* teach music, even if not musical. My pupils can take many intervals that I could not take when I began teaching them last fall. They have done remarkably well considering their teacher. Not a mistake that has been made reverts to my lack of musical ability but all to my faults as a teacher, and apply to every subject I teach." I am told by others that the superintendent there is frequently taking visitors into that room to see the excellent work in music.

And so instances could be multiplied indefinitely, of those, who, to their own great astonishment and delight, have succeeded in this line of work.

Of the teachers throughout the United States a large majority would say they are not musical, but of this number only a very few would be utterly devoid of ideas of tune or time. Indeed, positive inability to distinguish the pitch of sounds is very rare. Many people who would insist that they could not tell one tune from another would willingly admit that they could distinguish the voice or even the step of some friend.

To be sure tone-perception is more natural to some than to others, but it is a matter of education and can be cultivated in all.

Most teachers who say they are not musical deplore it, and if they can

but be made to see that they can do it, will be glad to supply to their pupils that of which they themselves so much feel the need.

What is called a "good ear" is not, as too many suppose, a rare gift, vouchsafed to the chosen few only, but when seemingly imperfect it arises not from any defect in the organ of hearing itself, but from want of education or practice in determining sounds.

Dr. W. H. Stone says in his "Elementary Lessons on Sound," that he and other scientists have experimented on a large number of persons without finding a single defective ear. There were many devoid of practice in estimating sounds and there were great differences in the amount of delicacy they could acquire, but all without exception, he states were susceptible of education.

While, then, it has been proven that all are susceptible of some aural education, it is desirable that it should be begun as early in life as possible, for in childhood the sensitiveness of the ear increases rapidly with use. The attention of the child may be directed to many sounds of the inanimate world. Let him sing the pitch of the church bells, car bells, school bells, steam whistles, a gong, a bottle, or even of a creaking door. Even the smallest children will enjoy these common-place object lessons in sound.

We have too many imitative singers; indeed we have but very few who are not such. In nearly every house there is a piano or organ, and singing without this accompaniment is hardly thought of. Many who are considered excellent readers of music are quite helpless without an instrument; they themselves do not realize to what an extent they are imitators.

I hope that soon instrumental aid to singing will be considered old-fashioned and then we will have more independent singers. No piano, however fine, can add to the beauty and sweetness of little children's voices and they should be spared the hindrance in their musical education of having an instrument do their thinking for them.

If all of our School Boards could afford it, if they really had more funds than they knew how to use, it might be allowable to have a piano or organ in each room for calisthenics, marching solos at rhetoricals, and so forth, but even then the risk would be great. The temptation to learn the new songs from the instrument would very likely be yielded to, and thus they would only "gain a loss."

How, then, can the average teacher succeed? *First*, by the help of a systematic series of textbooks, supplied either in the form of books and charts or both. Something that contains music of a high order, for little children will soon learn to appreciate such, and their taste for the best in musical as in other literature should be cultivated. In connection with these a pitch-pipe and simple pendulum or metronome should be provided.

Secondly, by carrying on the work with the same care and in accordance with the same principles that she conducts her other recitations.

It may not be out of place for me to say that having used in my work various series of books, I find nothing so perfectly adapted to the needs of both the experienced and inexperienced teacher of vocal music as the so-called Normal Music Readers and charts by J. W. Tufts and H. E. Holt of Boston.

The teacher who makes intelligent use of these according to the suggestions in the Teacher's Manual accompanying will find her work clearly outlined step by step, and an abundant supply of the best material for practice. By following out these simple directions it is my conviction, as the result of observation and experience, that the average teacher *can* succeed in teaching music.

I am aware that various other suggestions have been made and that there are those who believe that a simplified notation would greatly facilitate the work of the unmusical teacher. My own observation and experience, however, have not convinced me that a change in notation would be either helpful or desirable. Some six years since, as the result of a letter from one of the most earnest advocates in this country of the system of notation well known as the Tonic sol-fa system, I was induced to investigate carefully the methods and claims of this system with the view of employing it in my own teaching if convinced of the advantages claimed for it by its advocates; and while I did investigate the subject as carefully as I was able at that time, and have made special effort to inform myself through the published literature of the system, and through listening to the discussions and addresses that have been given from time to time at the great educational and musical conventions, as well as following the discussions through the press, and through the educational papers, I still believe that neither the average teacher nor the special teacher who understands the simple principles of teaching and is willing to apply them to teaching music can derive any possible benefit or assistance from either the permanent substitution or temporary use of the Tonic sol-fa, system of notation.

No teacher can apply to music the true principles of teaching who does not teach invisible sounds instead of their visible signs, and if these invisible things are properly taught together with their relations to each other—both in point of duration and pitch—the staff notation will be found, in my judgment, the most convenient, the most reasonable, and the most satisfactory expression of these invisible objects.

I am aware that the advocates of the Tonic sol-fa system claim freely that no one who has tried both would prefer the staff. One of the best primary teachers of my acquaintance writes me from a New Jersey town as follows: "Having taught both I am much better pleased with the staff notation than with the Tonic sol-fa. I never will go back to the latter unless the powers that reign above me demand it." Another

writes: "It seems to me that persons who have taught both the Tonic sol-fa and the staff notations can come to but one conclusion with regard to them, that the latter is much the better. I find the mind of the child can be trained to musical effects as thoroughly by the staff notation as by the other, and at the same time give *quicker results*."

The average teacher, then, certainly need not be deterred from undertaking the work through fear of the difficulties of the staff notation, nor need she feel it to be essential to her success in teaching vocal music to familiarize herself with any other system of notation than that furnished by the staff, whose difficulties will vanish the moment she undertakes the work in real earnest.

My confidence, then, in the educational and moral value of music and in the ability of the average teacher to teach it leads me to believe that the time is not far distant when music shall have its place in all our public schools, and shall be taught by our regular teachers. The inestimable advantages that will result from this recognition of vocal music in all our public schools are among the best of the many good things which the future has in store for us as citizens and teachers.

The proper teaching of vocal music in our public schools will prove one of the most valuable moral and intellectual forces, and the appreciation and love of good music which will be thus generally cultivated will refute forever the oft-repeated statement that we Americans are an unmusical people. But the effect upon our teachers themselves will be helpful and encouraging. The intelligent study of music will come as a relief and a recreation to relieve the monotony of the more taxing and irksome school-room duties, and to the "average teacher" as well as to her more brilliant and conspicuous brethren and sisters of the great teaching profession will be opened up new opportunities of usefulness, pleasure and self-cultivation.

WHAT MUSIC INSTRUCTION IN PUBLIC SCHOOLS SHOULD BE.

BY N. COE STEWART, CLEVELAND, OHIO.

Mr. President, Ladies and Gentlemen:—

There is much said nowadays about music instruction in the public schools. Honest people vary widely in their opinions respecting its value.

Most persons have either known or heard of something which seems to indicate that music was universally valuable, or have thought that perhaps it might be made so. Yet in many cases their observation has failed to confirm the conviction. Hence in many places where music had gained a foothold in school it has either been discontinued or allowed to dwindle to insignificance, because the effort made did not prove satisfactory, and the school managers are still in doubt. In very many other places music has not been introduced as a study, either because people have not thought much about it—which means that what they have thought and seen of music instruction has been very superficial and limited,—or because their appreciation of it has led them to think that they could not afford it.

Still again, where fair, but nothing like universal results have been reached, although there were willing pupils and hard-working teachers, it has been thought, foolishly, that *something was wrong with the notation*. Hence patent notes, tonic sol-fa and other unnecessary, yet well-meaning, efforts to simplify notation have been made. While in the absence of good teaching, or no teaching, these have done and may do some good, yet it is a sort of fireworks or novelty which attract attention to a "*system*" rather than that it is a fact that a new notation is necessary. All this may be well, provided people are induced thereby to think. Only it seems too bad that honest people should strive to turn the musical world upside down that a new notation may prevail, when there is no more *necessity* for it, than there would be for a child whose food and manner of living prevented his growth to have a new skin. Not much wrong with the existing notation, only with methods of teaching.

Visit some schools during a music lesson and you will hear the children screaming away, going over a song or exercise again and again, with more or less meaning (usually less), and when they have covered so many songs and exercises, and answered so many questions, they call their work finished, and really suppose they have been having good musical instruction.

In short, scarcely any two teachers have the same ideas when musical instruction is talked of. Hence it was thought to be a good thing that "*What is meant by music instruction,*" should be discussed, until all had an adequate notion of what was meant, and all had approximately the same ideal. Then our discussions and consultations will be to better purpose.

The present effort, while not presuming to be infallible nor to be set up as a model, is well meant, and is intended to militate toward a conclusion as to what music instruction should be, and also to answer in part the oft-repeated question, "Will it pay to make the effort and to undergo the expense necessary to place music instruction on a substantial footing?"

Does it make any difference whether an individual is *refined* or *coarse*? intellectual or ignorant? sympathetic or selfish? pious or wicked? whether physically and mentally strong, healthy, and vigorous, or weak, sickly, and nerveless? Does it make a difference whether there is the beaming eye, the glowing cheek, the elastic step, and the charming presence, which make lovable companionship, helpful association, appreciative sympathy, and causes one to exclaim, "*There is health*"; *there* is a "fine specimen of education"; there is your Christian; there is your friend that seems to have *within himself* the elements which produce happiness, the power to help others, and to charm away the cares and troubles of all with whom he comes in contact, both with his presence and by his song. Does it make a difference whether he is a whole, half, or one-fourth of a man?

Does it make a difference whether my bounding and joyous child shall sing or not sing? And whether he shall voice pure sentiment, in legitimate melody, or sing the ribald song of the dance house? Songs which speak of God, home, nature, affections, and happy play, or the senseless, vulgar, and vitiating song of the clown and the brothel? Does it make a difference?

Does it matter whether my pupils in school sing songs that will make them more cheerful, happier, and better in school and at home, songs to be pleasantly remembered throughout life, and songs which will tend continually toward the wise and majestic building of body, mind, and character? Does it matter whether this cheering, life-giving, glorious sunlight of song is theirs to show, to encourage, to help, and to cheer?

A short time ago while visiting in a refined and cultured home in Boston, where the classic song, the sonata, and the best of music, sung and played in almost faultless manner, were among the frequent employments and enjoyments, I asked myself, does this make a difference? Is this home better because of this? A few evenings later on while strolling with a friend by a humble dwelling on Old Orchard Beach, I was attracted by the sound of music within. We looked and saw the father with a fiddle,

and the son with a banjo, playing march, waltz, and jig, while occasionally it would be a song, in which mother and children would unite in the chorus. Even baby would crow and clap his hands. While looking at this picture of simple joy, in the rough frame of an Irishman's shanty, I could but ask, "Does music make a difference in this home?"

I went to church where the worshipers old and young, large and small, *all united heartily* in singing the stately stepping choral and well modulated anthem, accompanied by the full organ playing rich harmonies. This joyous, hopeful singing filled the whole house with music, which seemed to put the jars, the disappointments, the sorrows of the past week and past life into tune with the present, and with God's purposes, plans, and glory, thus lifting up the soul and giving it strength, hope and joy in preparation for subsequent labor and trial. Does it make a difference? (Can all mankind be thus brought under the influence and dominion of music?)

That the right study of vocal music will effect all this and more, there can be no doubt. It is true there may be counteracting elements and influences which may hinder, and even divert legitimate results into wrong channels, but the primary law remains, that "a healthy organism, under proper conditions, fed with appropriate food at stated times and for the necessary period, will develop into *maturity* or full growth. And after maturity will sustain the body during the limit of its natural life."

A condition of good singing is, that "the singer shall appropriate the sentiment of the song as his own, and shall express it with the earnestness and naturalness which the occasion may require."

Another condition is, that "he shall sing with pure tones, and so phrase his song that its musical meaning shall be expressed." Now in this manner let there be sung regularly throughout school life, patriotic songs, moral songs, religious songs, home songs, songs of the affections and purest sentiments, and children will as surely develop in these directions, as that they will live and thrive by proper use of healthful food. That such development is necessary no one doubts. And that music best gives it all must consent.

To sing *well* good songs, songs which contain the various sentiments, songs which are intended to excite the emotions, and thus to *develop* the children in these various directions, and at the *same time* as a consequence of such training, develop a *fondness* for music, and for music of a *legitimate kind*, with the æsthetic cultivation and emotional development consequent thereto, is ONE OF THE ITEMS INCLUDED in "What music instruction in public schools should be." I may state also what is doubtless evident to all that this instruction is imperative in view of a well-rounded or symmetrical education; and also that there is no other study that can substitute music's place.

Also the importance of teaching this subject correctly, and the great danger that is imminent from careless handling of this vital matter; will evidently be in your minds.

It will likewise be inferred that the method of teaching is of paramount importance, but of this more will be said subsequently.

My seven-year-old child comes to me after having been in school a *year* and says, "Hear me sing this pretty song." He sings his little song and I discover that he produces his tones correctly; his breathing is correct; the vowels are right; the tone is well sustained or sung nicely; he attacks the tones well; his pronunciation is good; the articulation is distinct, and in every way he uses all the organs which make up that wonderful instrument we call the "voice" correctly, just as he uses his little feet and legs in walking as perfectly as a man, although not yet a man; nor required to carry the burdens and perform the labors of a man.

It will not do to say to him, "Do not run too hard nor too fast, use your legs carefully, and after you are older and the muscles are firmer and stronger, then you can learn how to use them intelligently and well. Till then it makes but little difference, my boy, how the legs are used so that they are not strained." No! No!! it is the function of the voice that is to be considered, as in the use of the arms or other members of the body. Nature has here as in other parts of the body placed bone, muscle, and ligament in just the right place, and it is merely a question of *using them correctly* from the first, and of giving them such exercise as will strengthen and develop, until they can perform easily and well the demands of intelligent and legitimate song singing.

Thus to train the voice is another item included in "What music teaching in public schools should be." (And this may be done, too, by the *average teacher*, and in the usual school course.)

My curiosity being aroused by my child's singing, I visit his school, and find to my surprise that the little fellows are singing at sight,—time, tune, reading, and all correct,—the first time new exercises, within certain limits, which are written upon the blackboard. Thinking perhaps that it is a case of one supporting the other, like the bundle of sticks, I test the pupils separately and find that *all* can thus sing independently, varying only as they may vary in any other exercises. I am inclined to doubt my senses, so I investigate and find to my surprise that they have correct notions of what they are doing. That they understand the notes as things for the ear, the various marks or characters as things for the eye, and which either stand for or represent tones, or direct or tell the pupils what they are to do; and the pupils have practiced telling what they, the marks, say to them, and doing as they direct until they have acquired their present proficiency. I go on to higher grades and find that their study is like the child growing into the bigger boy and so on to the man, a process

similar in kind, but only taking on the new items rendered necessary by advancing grades, and the demands of older years. It is only the little tree growing into a big one, although as perfect in organization and function while little as when large.

I find this work carried on in our well-graded school until graduates from the high school sing part songs, anthems, and glees readily at sight, and are qualified to take their places in church choirs and musical societies, and this, too, every pupil can do.

This likewise is another item of "What music instruction in public schools should be"; and it might truthfully be said that with this thorough knowledge of the elements of music, so that pupils can write correctly their own musical thoughts and write a song when they hear it, can sing at sight, and have a taste or fondness for music, which must be consequent upon such drill, that the pupil is ready for life—musical speaking—and is qualified to go on to build up the character which right use of music will give, to discharge all musical duties, and thus to become, to do, and to influence without any further special musical study. Just as in reading, writing, and arithmetic, the ordinary school course should qualify him for the ordinary duties of life without private and special study.

To summarize: Creating and cultivating a fondness for music; learning songs and proper study of the same; moral and æsthetic development consequent upon such study; correct cultivation and training the voice; thorough knowledge of the elements of music; and acquiring the ability or power to sing new music readily at sight; with the mental development and other correlative benefits which necessarily result from such study, are what is comprehended, *directly*, by "teaching music in public schools."

That all this *can* be done is without question. And that every child, having intelligence and proper use of its senses, if beginning young, can so learn, is just as certain. It is then a question of how to teach, and how to practice, and I would finish in the wrong place if I did not show in a measure how it can be done, and point out the underlying principles both of instruction and practice. For good results from music teaching in the public schools mean that the pupils, the teachers, the parents, and the public must be in a proper condition to facilitate learning. The two former as the direct or immediate factors, and the latter as the legislative and moral support. In general it may be said that none of these parties universally have yet reached a desirable condition. There are of course some exceptions, hence preparing or working up the conditions is an important part of what "Music teaching in the public schools means."

First, your speaker desires to emphasize that these things are not and cannot be done by merely wishing that they were so; nor by com-

plaining that Boards of Education and the people are short-sighted respecting their vital interests, when they make no provision for music. But it must result from a protracted series of *wise, well-directed, and persistent* efforts. In other words, all these things, like the several items of the individual subjects, *must grow*, and like growth, demand first, life, second, healthy conditions, third, nourishment, and fourth, *time*, for the building of elements to cumulate or culminate in a natural stature. Spasmodic efforts will not suffice, but all willing and available forces must be enlisted; these must be added to when it is made possible so to do, and all must march steadily forward, until success is reached. This is nature's way of building up. No other way ought to be expected.

Already there is a great awakening throughout the land; many persons have found situations, and much good work is being done. So if those who already have positions do the right kind of work, if the matter is agitated through educational and other journals, if musicians, teachers, and the people already "imbued with the spirit," advertise and agitate, by word and deed, ere-long all civilization will see its value, and accept music as a necessary part of education, and will attend to the necessary legislation and other matters connected with its management.

It will be seen, then, that while conventions, musical revivals, and all intelligence reaching agencies are to be employed, nevertheless it is the *kind and quality of work the teacher does*, and the *material that he turns out* that will determine soonest the universal acceptance of music, and give it its proper place and fullest function among the *great educational forces*.

The children, then, are to be brought into the proper *attitude* for learning, and to be induced to make the required effort to learn, and to be guided in the necessary practice. For if they have and do these things they will as surely learn, and as surely acquire power or ability to do, as that young animals or vegetables will grow if they have the proper surroundings and the necessary food.

All children, whatever their present condition and standing in music, can be placed in the most favorable condition for them to learn, if the teacher is in every way qualified for his work. For children, like clay, are pliant, and notwithstanding the woody fibre and extraneous material which they may contain, can be moulded at will, provided the teacher has the required knowledge, discernment, and skill, to manage, to reject foreign and unassimilating elements, and to put the mass into desirable and legitimate shapes and forms.

The entire matter then is resolved into the simple query, "What is the teacher?" Let me know the teacher, his knowledge, manners, and methods, and I will tell you what his work will be.

The teacher, of course, should have a good education and should be

refined in thought and manner, as well as have a good musical education. But there is a specific or special normal training that is essential if he would be best equipped.

Now it is of his daily work that I would speak, and point out some features which experience has shown to be of the utmost importance.

It is possible to study and practice *hard*, and to observe the singer's rule of "over and over again," and yet not learn much, or at least not make the desired headway.

There should first be a good classification of the subject in hand. That is in each individual branch of the subject there should be "*points*" or "*steps*," which it should be understood that "the pupils are to *make*." For example, in the study of tones, after imitative and other preliminary work; and the pupils know that such and such sounds which they hear are called tones, the knowledge that a certain series of tones is called a scale, that each tone has a name, and that the scale sung in a certain way is called "ascending," and in another way "descending." When the pupil is able to sing this scale *readily*, ascending and descending, by syllable, by name, and by word, a "*point*" is made. Again when the pupils can name or write the tones as far as *three* or *five* when they hear them, and can sing them *readily*, that is without hesitation or waiting, another "*point*" is made. The next "*point*" would be learning the tones between *four* and *eight*, and so on, making "*points*" until the minor and chromatic scales were also learned. Or in reading, when it is understood that the lines and spaces which they see stand for or represent the tones which they cannot see. And that a certain line or space represents *one*. When the *ability is acquired* to remember that line or space and to read *without hesitation*, or stopping to think, as far as, say four—two lines and two spaces,—a "*point*" is made. (Illustrate.) Notes placed on lines, and spaces tell which tone is to be sung, or rather that the tone represented by that line or space is to be sung, and should *not* be introduced until the idea of reading is well understood and considerable facility is attained in reading. When the student can follow the line of notes and tell without hesitation which tone is to be sung, the "*point*" is made.

Please to remember that when the student *knows this*, and is able to read slowly or in a hesitating manner, he has not yet made a "*point*." Not until he can remember any line or space indicated and read without hesitation, although it may be rather *slow*, has he made the "*point*."

The next reading "*point*" would be to remember a line or space and learn to read reading *below* it. (Illustrate.) When this point is made, put the first and second "*points*" together, and so proceed from "*point*" to "*point*" until the matter of *reading* is compassed.

Again in rhythm, the first thought is, that "time is constantly *passing*."

As this time passes it is "cut into" equal *pieces* or *divisions*, by a stroke, motion, or impulse. This marking or cutting passing time into equal divisions is called "*measuring time*." By making every other, or every third or every fourth count or stroke *louder*, the parts of time are bunched or grouped into panels so to speak, which contain two, or three, or more of the equal parts of time. These bunches or groups of time are called measures. Now when the learner is able to tell, by the *accent*, from hearing his teacher tap, beat, or count whether it is two or three, or four or six part measure, and can measure time himself he has made a "*point*." *Knowing* is not enough, please to remember, but there must also be the *doing*. Then tones are introduced which *continue through one part of time* or one part of a *measure*. When the pupil can measure time, and sing these correctly, another "*point*" is made. Then tones which continue through two parts of time are introduced. And when the pupils can tell readily the tones, and their length from hearing them sung, and can beat or measure time and sing them *readily*, as the teacher directs, another "*point*" is made. Then *notes* are introduced as telling "which of these tones is to be sung"; bars as saying "the end of the measure"; the figure as telling "the kind of measure"; etc., every mark representing something or telling to do something which is understood well. You will now, I am sure, understand what I mean by a "*point*," and it is only necessary to say that in "training the voice," in "the study of tunes," or in "learning to sing," etc., etc., the same idea of marking off steps or making "*points*" is to be observed. Now these "*points*" are made by first obtaining a clear understanding of the *thing itself*, and what it is that is to be done; then by continuous "*trying to do*" each effort giving a little more power, until by and by the *ability is acquired*. Without this *repeated intelligent trying*, which corresponds to successive meals in growing, there cannot be ultimate success.

It is apparent also that this effort should and must be cheerful, earnest, and *hard tried*, to achieve the greatest advance or gain. And to obtain this effort from the pupil is the most difficult task of the teacher. But if the pupil is induced to make the effort, and holds on to one point until he makes it before advancing to another, his progress will be as sure as fate, and his final mastering of all fundamental points only a question of time.

To get every pupil in a class to make this effort is the problem for class teachers to solve, yet it *can be done*, the main thing being to *start right*. One of the best aids is that the pupil shall know or comprehend the underlying principle that he *must try*, must make this hearty effort; that he himself is responsible; that every time he tries he gains a little, even though he cannot perceive it, but by continuing to try, by and by he will be able to do it. Then when a pupil has made a "*point*," credit him

with having made it, and give your attention to those who have not yet done so. By singling out the slow, the lazy, and the indifferent pupils, and by stirring them up and inciting and encouraging them to make the required effort, and checking them off when they have made a point, by and by every pupil in your school will have accomplished the work laid out for his grade. Just here is where the cheerful manner and personal power of the teacher manifests itself. If he have all these unspeakable qualities, in addition to his knowledge, he is thrice fitted for his calling.

Do you see anything unreasonable or impossible in this? Is it not the way all intelligent progress is made? Is not "*work*" the *universal* price that must be paid for genuine success? Then why not seek to understand our work? to obtain exalted views of its excellence and importance? to seek such classification and manner of conducting its study as will make practice a delight and success certain?

We are assuredly *on the way*: while there is much to be done, yet we are not of the kind who say, "It cannot be." But rather, its importance demands that it should be done; and by the earnest purpose and searching investigation of the American teachers and grace of God, it *shall be done*.

I would urge that the music superintendent and school music teacher shall strive to become *good musicians as well*.

There is, as perhaps you know, a public school department in the American College of Musicians, which is an outgrowth of the Music Teachers' National Association, and in which the public schools have always borne a conspicuous part.

This college is composed of one hundred and thirty-five members, selected from the best musicians of the United States. It is incorporated under existing laws, and is the only real authority which is empowered to make examinations and grant musical degrees.

Its board of eighteen examiners include two public school music superintendents who have the highest musical degree of any musicians in the United States, equalled only by the other examiners.

I would advise public school music people to place themselves in sympathy with this great movement. Prepare themselves for examination and take their degree. The Music Teachers' National Association, through the Department of Education at Washington, issues this month a pamphlet on public school music, which will be sent to Boards of Education and prominent teachers throughout the country.

Thus you will perceive the great musicians, who formerly sneered at music teaching in public schools, are now in active sympathy with it, and are doing all in their power to promote its interests.

They depend upon public school music people for their information, and desire to co-operate with them in all reasonable ways for the advancement

of music. We have a Department of Music in the National Educational Association, and thus you see the great educational and art forces are enlisted on the side of music. By doing every one his duty in his own section of the country and in his own sphere, by seeking to improve his own musicianly ability, by *looking out* and *not in*, by continuing to attend the National and other Associations, and to induce others to do so, and when there to give the Association the best of his experience and advice, by thus seeking for and doing the best, music will advance until all the people obtain from music what it has for them, and *are* what the proper study of music will make them.

If the music teachers do not rise to the dignity of a department in the greatest Educational Association of the world, it is not the fault of music, but their own lack of zeal or knowledge.

May God speed our mission.

BETTER TEACHING OR A NEW NOTATION, WHICH?

BY H. E. HOLT, SUPERVISOR OF MUSIC, BOSTON, MASS.

The educational value of vocal music in public schools is recognized by all educators. I am not here to plead for music, but for *better instruction* in music, for *improved* methods in teaching which will enable the regular teachers to teach music as they do other branches of study. Until this can be done we cannot hope to have music *generally* and *successfully* taught in our public schools. In order to judge of the educational value of different systems and methods of teaching, we must go to their foundation and ascertain the soundness of the principles upon which they are based. In order that I may not be misunderstood, and that my position may be clearly defined in this discussion, I desire to examine some of the principal systems and methods of teaching, from what seems to me to be the true pedagogical standpoint. In doing this I would not for a moment be considered as detracting from the work of those who have preceded us. Many of them worked conscientiously and faithfully according to the best light that they possessed and we have entered into their labors. I reverence the names of such men as Dr. Lowell Mason and Rev. John Curwen, and I desire to record at all times my grateful appreciation of what these and many other noble workers have done for the cause of elementary music in schools. But this is an age of progress in all departments of instruction, and to deny that progress has been made in the methods of teaching music in the last decade, or that such progress is to be made in still greater degree in the future, is to affirm that music has nothing in common with all other departments of knowledge. Many years ago Dr. Lowell Mason gave us his Golden Rule for teaching elementary music. "The thing before the sign of the thing and one thing at a time." This is a general truism in all teaching. It has been repeated over and over again as a guide in teaching this and all other subjects, until the merest novice understands the rule, but it is meaningless and of no value unless intelligently comprehended and applied. All will admit the soundness of the principle as stated in Dr. Mason's Golden Rule, but the real issue comes in the diversity of opinion as to what is the "*thing*," for without the definite "*thing*" or object of thought to present to the mind, there can be no intelligent beginning in the teaching of any subject, and it is from the standpoint of this fundamental principle in all teaching

that I wish to discuss this question of methods in teaching music. I shall deal with the methods of teaching, as published in three prominent and well-known systems. I refer to the methods of teaching as set forth by Dr. Lowell Mason, and also what we will designate as the Hohman's system, which we have imported into this country, also Rev. John Curwen's System known as Tonic Sol-Fa. My object will be to show the cause of failure as I fully believe in many instances where adequate results have not been realized and where some have erroneously attributed the cause of failure to the difficulties of the staff notation. Taking for my text Dr. Mason's Golden Rule — "The thing before the sign of the thing and one thing at a time," I shall try to point out some of the causes of failure and to suggest a remedy.

DR. LOWELL MASON'S SYSTEM.

I wish first to examine the application of this Golden Rule as made by its author. The methods of presenting the subject of music as published by Dr. Lowell Mason and Mr. Seward in their Manual for teachers, presents a single sound as the "*thing*" or *object* of thought. Now a single isolated sound in music has no meaning either in pitch or duration — nor is it possible to teach a single isolated sound musically considered. If the major scale is the "*thing*" or unit of thought, as I claim, in the study of the pitch of sounds, then the author of the Golden Rule takes sixty-two pages of his Manual and over *four hundred* questions before the "*thing*" or unit of thought is completed and presented to the mind, when it should have been presented the first minute of the first lesson without a single question. Could we hope to succeed in teaching any other subject with any such application of the Golden Rule principle of objective teaching as this? The same fault runs all through the methods of instruction in developing the subject as set forth by Dr. Mason and Mr. Seward in their instruction to teachers. When we consider how far from the true basis of objective teaching in this subject this system of instruction has led every teacher who has followed it, can we wonder that the surviving author of such methods should be carried away with a system which, while very imperfect in this direction, is nevertheless, a little nearer approach to the objective principle.

In the light of present developments it is safe to say that any skillful teacher in our public schools would be able to teach the "*thing*," *name it, represent it*, and develop the ability on the part of a class of children to sing any modulation from one key to another, before the unit of thought could have been completed and presented to the mind, following out the methods of presenting the subject as set forth by Dr. Mason. In the light of these facts, while respecting and venerating the memory of Dr.

Lowell Mason, and giving full credit for the noble work which he did for the cause of elementary music in his day, we are forced to the conclusion that he never made a practical application of his own Golden Rule.

THE HOHMAN'S OR "BOSTON SYSTEM."

We will now consider the application of Dr. Mason's Golden Rule as made in the Hohman's, or what has been sometimes advertised in this country as the "Boston System." This system presents the two subjects of tune and time *simultaneously* and makes the exercise or song, the "*thing*" or *object* of thought. This is presented as a whole, *taught by rote or imitation*, and "song-singing is made the basis of instruction." The fallacy of this presentation of the subject *educationally* will be apparent to all teachers. It is in direct opposition to all true educational methods employed in teaching other subjects. It presents two distinct and intricate subjects (Tune and Time) to the mind, at one and the same time, without any intelligent thought having been previously given to either. In this it is a direct violation of this Golden Rule which says, "*one thing at a time.*" It does for the children in music just what would be done in teaching arithmetic, if the teachers were required to work out all of the problems for the pupils, having them commit the answers to memory and recite them in concert. This *quality* of teaching would not be tolerated for a single day in any other department of education. It is a fundamental law in education, that the mind gains power only through its own activity. *Knowledge* in music is gained by *thinking* and not by *memorizing*. Blot out what we have learned by rote, and our power to think in music will measure our real knowledge. The importance of this subject to the country at large is too great to allow the withholding of any facts that will throw light upon the real condition of music in schools where it has been longest taught. Had the recent investigation by the Board of Supervisors of Boston been made upon the *uneducational principles and methods of teaching* employed in the schools, with a view to improving the same, instead of exposing the results of the present system, it would have been found that in a few primary classes, where these uneducational principles and methods have been abandoned, that more real musical intelligence exists, than is shown by an equal number of pupils in the High and Normal Schools who have been instructed upon the old plan of rote-singing. Any system of instruction which requires the teacher to sing or play for the pupils to imitate (beyond establishing the major scale), cannot be considered educational. And any system of instruction which does not reach the individual pupil is not worthy the name of a system. The most favorable time for this individual training in musical sounds is the time when the child receives his individual training in num-

bers. Any large city with plenty of money can employ musicians to teach songs by rote, and with a large chorus of children thus taught and a large orchestra can make most delightful and pleasing exhibitions, and gain a great reputation for music in its schools, but this is too expensive a luxury for most places. The time has come when the teaching of music in public schools will not be confined to a few wealthy cities, to be taught in any such expensive and superficial manner.

Boston has been foremost in all matters of education. She was first to introduce and carry forward the instruction in music in her schools. She has spent money without stint in this department of instruction. If it has not been most wisely spent, it was the best that was known at the time. At the present time Boston has forty-five thousand dollars invested in pianos, the tuning alone of which costs twelve hundred dollars a year. A large part of this expense was made necessary in order to carry out her present method of instruction in the *primary* schools. In the light of present developments growing out of improved methods of instruction it will be apparent to any unprejudiced educator who will take the trouble to investigate the subject carefully, that this great outlay is not only unnecessary, but that these pianos have been a *positive hindrance* to real intelligent progress in vocal music on the part of both teachers and pupils. One piano in each Assembly Hall is sufficient for all purposes. The inability of so large a number of pupils to sing (*after eight years' instruction*), an exercise so simple as the following test:



used by the Board of Supervisors in their recent investigation, is sufficient evidence of the uneducational methods of instruction given in schools. The Report says, "The number of children who sang the piece at sight, and at least, passably well, varied from one-half to two-thirds of the whole." Can we afford to employ methods of instruction in music in public schools which are so uneducational in their results, as to require the teacher of a Normal School to spend his time by the hour giving young ladies of his school practice upon the simple sounds of the major scale, simply because they were kept *parroting* "Lovely May do not Stay," and other exercises and songs in the same way in the lower grades, instead of being trained to *think intelligently* in sounds the same as in other things? I know whereof I affirm, and this is the real condition of musical education in schools where it has been longest and generally supposed to have been most successfully taught. Children have been taught to sing songs by *imitation* and by the aid of *musical instruments*, and the people all the while supposed the singing to be the result of real musical intelligence on the part of the pupils.

A prominent clergyman of Boston in a sermon delivered within the past year, made the (to some people) startling declaration that the "teaching of music in the Boston schools was an *abject failure*." If we compare the uneducational methods of teaching at present required by the School Board in carrying out its present system of instruction, with the improved methods of teaching other subjects, we shall find abundant reason for the truthfulness of the statement, however humiliating it may be. *Teaching power* is the great need in this department of public instruction. *Thousands* of teachers in our public schools would teach music *most successfully* could they only be shown that they can teach music just as they teach other studies, and that it is not necessary for them to sing either *for* or *with* the children in order to do the most successful work.

The best interest of music in public schools demands that we should say that so wonderfully simple and practical in its application is the educational method of objective teaching which has come to us during the past three years, that we can so instruct any intelligent corps of teachers as to enable them to obtain infinitely better results without our aid in the schoolroom, than we have been able to obtain following out the course of instruction required by the School Board of Boston. We shall hold ourselves in readiness to demonstrate this fact at any time. The only hope for the general introduction and successful teaching of vocal music in public schools is through the regular teachers. The great want at present is their skillful instruction and supervision. The greatest hindrance to progress in musical education in public schools, at present, is music teachers who do not see educational principles underlying the work, and who consequently regard the legitimate results of skillful teaching as "impossible of attainment."

TONIC SOL FA.

I now come to measure with Dr. Mason's Golden Rule the methods of teaching in the much heralded Tonic Sol Fa system. The principle of associating sounds in that system is correct, but it cannot be claimed as new or as peculiar to that system, as it has always been used in this country, though in a somewhat limited way, and the whole construction of music is based upon it. The idea of teaching rhythm with a language is the true one, and all successful teachers must adopt it in some form in teaching instrumental as well as vocal music. This, however, was not original with Mr. Curwen and is not peculiar to the Tonic Sol Fa system. We are alike indebted to the French Cheve system for this idea. While upon a careful examination of the Tonic Sol Fa system, we find the principle of associating sounds and the idea of teaching time with a time language to be correct, we find that the system itself has been vastly overestimated by its zealous advocates. The methods of *presenting, naming, and representing* the subject of music in the Tonic Sol Fa system are so unpedagogical and faulty, that no practical teacher of other subjects would think of teaching music in this way if fully alive to these defects. If the President of the American Tonic Sol Fa Association represents the system correctly regarding the units of thought in that system, upon which the two fundamental ideas of tune and time are based, then the Tonic Sol Fa methods are not in accordance with established laws in teaching other subjects. The *unit or object* of thought in studying the pitch of sounds is the *whole major scale*. It is *not a single sound*. It is *not a succession* of sounds in the form of a melody. It is not the chord as claimed by the leader of the Tonic Sol Fa movement in this country. Whatever the Tonic Sol Fa has accomplished, has been done upon an entirely different basis, and those who do not know it cannot fully understand the system. The transitions in Tonic Sol Fa cannot be made upon the principle of regarding the *chord* as the unit or object of thought.

Again—The position taken by the Tonic Sol Faists, that the beat or pulse is the unit or object of thought in teaching rhythm, is not correct and cannot be maintained from the pedagogical standpoint. A unit or object of thought must be some thing that the mind can conceive and grasp as a *whole thing*. It cannot do this of a single beat or pulsation. A single beat or pulse has no end until it is marked by a *return* or another pulse,—then it becomes a two part measure. The different forms of measure must be established in the mind as *units* composed of groups of accents.

Again—The Tonic Sol Fa system unites the two subjects of *tune* and *time* long before the unit of *thought* is completed upon which tune is based. This is done in such a way as to compel the use of very monotonous, meaningless, and unmusical exercises and songs. This is no less

objectionable and vitiating to good musical taste, than equally objectionable sentences in teaching language, which in teaching language would not be tolerated for a single moment. This elementary work in the Tonic Sol Fa is also objectionable on account of keeping the voice a long time practicing monotonous concords. Voices can be very much more easily and effectually tuned, and perfect intonation and tuneful singing is secured, by comparing and resolving discordant notes than by practicing concords. Music composed entirely of concords is very stale and meaningless. It is very important that children should sing from the beginning none but well-written exercises and songs. Everything should be *musical*. Children learn to appreciate good music much more readily than adults. We can never establish a true musical taste so long as we give children unmusical exercises and songs for practice. The quality of the musical food given to children in their early years is a subject which has not received the attention which its importance demands. Let us see to it that we go forward and not backward in this important matter. The condition of musical education in England some forty years ago when the Tonic Sol Fa was introduced, was very different from what it is to-day in this country. Great improvements in educational methods employed in teaching other branches have been made in both countries. The application of these educational principles and methods to the teaching of music has not kept pace with the advancement made all along the line in other studies. Ignorance of these educational principles and their application to music in England, made the introduction of the Tonic Sol Fa system possible, and under the same conditions it would grow and thrive anywhere. Nothing but a continuance of this ignorance will keep the system alive, for it can feed upon nothing else. While the Tonic Sol Fa should have full credit for whatever it has accomplished, the fact that it exists at all is the saddest possible commentary upon the manner in which music has been taught from the established notation in England. There are two questions which no Tonic Sol Faist has seemed anxious to answer. The first is this,—Do you propose to do away with the staff notation, and substitute the Tonic Sol Fa altogether, and finally for singing? If not, just when do you propose to drop the Tonic Sol Fa and take the staff? Now Brother Tonic Sol Faists! you must take your position definitely upon these questions, then we shall know just where you stand, and what you propose. If it is your claim that the Tonic Sol Fa is necessary in order to get better results with the staff notation, let us know it. If it is useful only to conceal ignorance in teaching at the expense of the little ones let us know that also, and go to the teachers of America with the issue. They are certainly too loyal, too earnest, and too devoted to the grand work to which they are called, to consent to any device to conceal inefficiency or ignorance on their part. My principal objection, only ob-

jection, and final objection to the Tonic Sol Fa system, in addition to the defects named, is that better results can be produced without it. *This can certainly be done.*

How can this be accomplished?

(1) Instruction in music must be put upon an educational basis with other school studies and taught as other branches are taught by the regular teacher. When our methods of teaching are made to conform to the best educational methods in teaching other objects, the regular teachers will be successful in teaching music.

(2) The teaching of vocal music must be divided into its two natural and distinct divisions—*Tune* and *Time*. These subjects must be taught *separately* at the *beginning*.

Rote-singing is not the best means of developing tone perception either in pitch or rhythm, and it should only be used as a means of recreation and entertainment with very young children. Continued rote-singing is a positive *hindrance* in teaching children to sing *intelligently*.

(3) Children should be given daily systematic practice in the study of *tune* or the pitch of sounds. They should not only know and be able to give instantly the sounds of the scale in their relation to each other, but should be perfectly familiar with each sound in its relation to every other key. This knowledge can be gained during the primary school course (three years), so that all problems in intervals will ever after be easily solved by the pupils.

A thorough knowledge derived from training in musical sounds, should precede the technical study of harmony and the playing of musical instruments. There is no place so appropriate for this training and none where it can be so well and successfully accomplished as in the public schools, and by the regular teachers. The knowledge of musical sounds thus gained, stands in the same relation to intelligent singing, as an intelligent knowledge of simple numbers and their combinations bears to mathematics. If we would secure the best results in teaching music in our schools, we must withhold the use of *musical instruments* as a means of instruction or as aids in singing. Prompt, self-reliant singing is never heard where an instrument is constantly used. The golden opportunity for developing tone perception and training the mind in music, and thus laying a sure foundation for a musical education is in the *lowest class* in our primary schools. Here individual training can be as easily and successfully done in music as in numbers, reading, or any other study. If we neglect this training here it can never be so successfully accomplished after this period is passed. But this growth and development must be from *within* and not from *without*. A musical artist is not necessary but a *skillful teacher* is *indispensable*.

I have endeavored in this paper to point out what seem to me to be

some of the errors which have seriously hindered in the past that general progress in music education in this country, which we all desire so much to see, and to indicate in a few brief hints how these errors may be avoided in the future. I have also given some of the reasons which have led me to the conviction after careful consideration, that the introduction of the so-called Tonic Sol Fa system cannot yield the slightest assistance, where music is taught as it is taught to-day by those who are applying real educational principles in their teaching. In the light of this view I might declare my belief that such persons, viz., those who are applying educational methods to the teaching of vocal music, without discarding the staff, are *so far in advance of Tonic Sol Methods* that the latter notation cannot be of the slightest value to them and must be a hindrance to the pupil's progress. I trust that I need not add in justice to myself that the examination and discussion of methods and systems in this paper are undertaken in no spirit of controversy, but solely with the hope that I may in some measure help to clear away from the subject some of the mist and smoke that have surrounded it, and to aid in enlisting the active interest and co-operative efforts of the great body of our teachers and educators, to secure economy of time and effort, and to hasten the time when all our children in all our schools shall learn to sing *intelligently*.

It seems to me that we have abundant reason to take courage in our great work. At no previous time has there been so much interest manifested by educators and by the people generally as at present. Parents are beginning to appreciate the value of music in their homes, and educators as they see how universal is the musical talent among the children, which is now dormant and only needs the magic touch of the skillful teacher to bring it forth, are more anxious to develop this great educational power for the good of the children and the race. The time is now at hand when, through *good teaching*, this long neglected study shall have its rightful place and yield the best results.

THE TONIC SOL-FA NOTATION AS A FACTOR IN MUSICAL EDUCATION.

BY THEODORE F. SEWARD, OF NEW YORK.

Man's relation to music is twofold. It may be objective or it may be subjective. He may be a mere listener, or he may be a participant. It is the latter characteristic which gives music a unique place among the arts. We may receive an impression—an uplifting—from a musical performance as from a painting. But the painting must ever remain an outward and separate object, while, with music, we may enter into and become a part of that which delights and inspires us.

But the distinction goes much farther than this. While all people can be trained to a degree of appreciation of painting, sculpture, or fine architecture, the great majority of mankind cannot themselves be painters, sculptors, or architects. Music is the one art that may enter into the personal experience of every individual. Music is keyed to the whole range of human faculties. On the side of nature its simple melodies may be on the lips and in the hearts of the humblest. On the side of art its symphonies rise to a colossal height of bewildering complication that taxes the appreciation of those who are most richly endowed by nature and cultivation.

It is with nature's side of the art that we, as teachers of the rising generation, have to do. A great awakening has suddenly become apparent on all sides with regard to the value of music as a factor in education. As a nation we are unquestionably taking a new start in the history of music as related to our school system. How important it is that this new departure should be on the soundest possible basis. As a teacher of thirty years' experience, as one who has been led by editorial work for more than half that time to look upon music in its broadest aspects, as one who has made an earnest study of the school methods of the various European countries, I wish to present certain considerations which have been proved to be vital to the interests of popular music.

I have said that man's relation to music is twofold: the relation of a listener and the relation of a participant. But beyond that division there is a subdivision which has never received a proper consideration till the present day, although it is based upon the most marked distinction that is to be found in the whole constitution of our nature. The distinction that

I refer to is the one that grows out of the difference between the human hand and the human voice.

A curious statement, you will say. But it will not take you long to realize that the distinction, so far from being fanciful, leads directly to one of the greatest reforms in method and result that has ever been witnessed in the history of education.

Have you ever duly considered the almost supernatural qualities of the human voice? Think of its capacities. It has the gift of speech. It has the gift of song. It can lament. It can rejoice. It can imitate all other sounds. The aim of all musical instruments is to reproduce as nearly as possible its godlike tones. And in the art of music itself how it towers above all our puny inventions. The little bundle of muscles and cartilages in the human throat produces almost without conscious effort that which in the piano or organ requires a hundred or a thousand pieces of mechanism. We see on the key-board of a piano a complicated array of black and white keys—sharps, flats, and naturals. Has an examination of the vocal apparatus ever brought to light any sharps or flats in that marvelous piece of mechanism? This question seems to you almost an unpardonable absurdity. Yet such is the slow progress of human development, in the direction of simplicity, that it has taken a thousand years to discover that this vital distinction between the voice and the hand in the expression or production of music should also be made the foundation of a system for studying it.

After a natural method of treating music is established, the world will look back with amazement upon the artificial period, and will never cease to wonder that it should have been so long continued.

Let us review the musical history of a child. The mother begins the unconscious training of its musical perceptions by her soft lullabies, while it is still in her arms. Soon it tries to imitate her. If the nature is inclined to be musical, it will gradually join its voice with hers, and will thus use correctly the language of music before it gains the power of speech. This is a common experience. It is not possible to overestimate or to describe extravagantly the simplicity, the grace—in a word, the naturalness of the language of music.

At length, in childhood, in youth, or in maturity, it begins to study the laws of this language of nature. But the moment it does so, all simplicity disappears. Why this sudden change? It is because the written language of music is a language for the hand, and not for the voice. The staff representation of music is an outgrowth of instrumental complications. Musical instruments require separate mechanical appliances for twelve different keys. Therefore the staff has varying signs to correspond. Musical instruments cannot give out the scale—the alphabet of nature—at different ranges of pitch without mechanical variations—that

is, each scale has tones that are foreign to all other scales. This is unavoidable. It is a part of the divine order. It is something to admire and not to criticise. We look at the key-board of a piano and are filled with wonder at the thought that the utmost range and possibility of the art of music are represented within that sweep of a man's hand.

But we must not carry our admiration too far. We must not be led by it to forget that God has written another law of music in our members, and one that is a more direct expression of His order and method than the cunning instrument of man's invention.

Human methods are invariably complex. In God alone is absolute simplicity. He came to the earth two thousand years ago, gave to mankind a few plain rules for living, and showed by His own life how they could be carried out. Human nature took possession of those simple laws of love to God and man; manufactured vast theological systems out of them; tortured them into excuses for persecuting and killing each other; did everything but use them as a plain way to happiness on earth, an abundant entrance into eternal life.

Do not imagine that I am wandering from my subject. I stand here to plead for a restoration of divine order to the heavenly art of music. It is necessary for me to show that the principles I advocate are as deep as the human soul itself, and that they lie at the very foundation of our being.

I have said, and you all agree, that song is a simple language. Being emotional and moral in its first elements, rather than intellectual, little children can receive and use it with delight, and minds of the humblest capacity are not hindered from enjoying it. Now, since you concede that point of the simplicity of music, how do you account for the fact that so few people understand it? Why do you, representatives of the highest culture of our land, know less about music than of any other subject to which you have given even a small degree of attention?

The burden of the proof lies with you. It belongs to you either to show that this state of things is necessary and unavoidable, or, if you cannot make it so appear, to cordially greet a movement that proposes to "reform it altogether." At least, it is clear that you have no right to treat such a movement with indifference till you have thoroughly examined its credentials.

I can show you, by a very simple illustration, why the mass of the people cannot understand music.

Suppose the values of the numerals 1, 2, 3, etc., were continually changing. After teaching your pupils to add, subtract, multiply, and divide, you would be compelled to say, "When you see two crosses at the beginning of an example, it shows that two now means 1, 3 means 2, and so on. After working the problems in that way for a time, you

announce another change, in which 3 shall stand for 1, 4 for 2; and so with the whole nine integers. I do not need to ask you how the subject of mathematics would prosper in our schools on that basis.

Friends and fellow-teachers, this is the simple gospel truth with regard to the staff representation of music. Most of you are aware of it, although you have never realized its educational significance.

The staff begins by presenting certain signs for the tones. The tone 1 (so named, usually by elementary teachers) on the first added line below, 2 of the space below, 3 on the first line, etc. But after a time the teacher is obliged to say, "When you see two crosses (sharps) or five flats at the beginning, it shows that 2 has now become 1, 3 has become 2," and so with the rest. After puzzling their brains over that a while, the pupils are informed that four sharps or three flats indicate the change of 3 to 1, 4 to 2, and thus throughout the scale. Every unfortunate sign is required to exchange meanings with its equally unfortunate fellows. And there is not the slightest alteration in the appearance of the notes to indicate or suggest their altered meaning. If the signature at the beginning is concealed, the notes are chaos. They may mean anything, and therefore they mean nothing. The complications and perplexities of this scheme are so vast and overwhelming that many musicians have sought refuge in the *fixed Do* plan. At first sight this would seem to be a solution of the difficulty. But never was there a greater delusion. The movable *Do* is difficult; the fixed *Do* is, to the average human mind, impossible. To continue the mathematical comparison, while the movable *Do* changes the *powers* of the numbers, the fixed *Do* gives perpetually changing *results*: 2 is always 2, but 2 and 2 sometimes make 4, sometimes 5, sometimes 6. Nothing less than an inborn musical genius will enable one to grapple successfully with the problems of music through the unnatural fixed *Do* process.

Let us not lose sight of the aim of our discussion. I will restate it in a word. Music is simple. Yet most people cannot understand it or read it. Why this discrepancy? I have shown that it arises from the complexity of its representation, or written signs. You may meet me at this point with the question, "Do not the signs correspond with music as it is? Music is simple as a language, but as an art it is complicated. There are different keys, and in the changes of those keys, 2 actually does become 1, and so through the variations you have described. Can the representation of music be more simple than music itself?"

This brings us back to nature again. It is true that there are different keys, yet it is also true that to the voice they are all alike. You cannot, if you try, make yourself conscious of any difference between singing in the key of D, two sharps, or the key of D flat, five flats. With musical instruments, and with the hand, each change of key involves a change of

constituent tones and a change in the manner of performance. With the voice the various keys bring no change of mental impression, and call for no different powers in the manner of execution. Yet, as I said before, it has taken the world a thousand years to realize that there must be a method of writing music corresponding with the simplicity of the vocal method, before the human race, as a race, could understand it.

The first suggestion of this thought is always startling. It occasions a sort of shock. The mind shrinks from it as something too revolutionary. But as we continue to dwell upon it, the reasonableness of the theory begins to take possession of us, and we soon come to realize it as inevitable. Then we are led to exclaim, "How strange that such an obvious idea should have remained concealed to this late day!" And truly, it is a mystery that is not easy of solution. It can only be accounted for by the disinclination of the human mind to follow the laws of simplicity. It is not only the "heathen Chinese" who is inclined to ways that are dark and tricks that are vain,—it is a universal tendency of the human race. Hence it is found that although every word we Tonic Sol-faists say on the subject is merely the statement of a demonstrated truth, as much so as if we asserted that the three angles of a triangle are equivalent to two right angles, yet our words are doubted by the mass of the people, and strongly opposed by a majority of the musical profession. With the former—the people—it is merely a case of inertia. They are slow to move on the same principle that all large bodies are slow to move. As to the method itself, they are merely indifferent. With the music teachers another element comes in. A new method seems like an encroachment on their rights. Their first instinct is to regard it as an enemy, and to oppose it on that ground. What points are they able to make in opposition to it? Not one, that I have ever heard. The burden of their argument, if such it may be called, is to assert that the staff is not so complicated as we claim it to be, and that, with proper teaching, the ability to understand and read music *can* be gained in connection with the lines and spaces, clefs, flats, sharps, naturals, transpositions of the scale, and all that catalogue of sweet simplicity.

We do not pretend to deny this. What folly to do so when thousands have become proficient musicians by that method. But you perceive that that does not really touch the question at all, which is, "May there not be an easier and better way of doing it?"

I rejoice that the question is made a direct issue on this platform. The most active champion of the staff notation, acknowledging that the musical education of the masses of the people has not yet been accomplished, asks you to consider whether the failure is due to the difficulties of the old symbols or to the imperfect teaching that has hitherto accompanied, them. The title of his essay, as given in the *Educational Bulletin*, is

"Better Teaching or New Notation, Which?" Our reply is, "Both." A notation that is founded upon the laws of nature will inevitably lead to better teaching. Mr. Holt argues that improved methods of teaching will alone make our nation musical. I ask you, can the most perfect conceivable teaching exert such an influence upon the learner's mind as to make that seem simple which is in its very nature complex? Could the most ideal teacher of arithmetic accomplish with the Roman numerals as much as even a bungling teacher with the simple Arabic figures? No, my friends and fellow-teachers of America; this wholesale indictment of the teachers of elementary music is the last desperate strait of those who are striving to perpetuate the most unwieldy educational machine that ever was created. And it is necessary to call your attention to their manner of carrying on the warfare. It would only be deceiving ourselves to try and imagine that it is not a warfare. There is an irrepressible conflict between the two methods which will not cease till one or the other has possession of the field. They adopt the various ingenious devices and incidental methods that have grown out of the Tonic Sol-fa system, and then say to the public, "Do not trouble yourself with this new-fangled notation. We have engrafted on our system all that is of value in Tonic Sol-fa. Come with us, dear friends, and we will do you the most good." If this were true we would not say one word. I must confess to having believed it to be true myself at one period of my history. It seems with musicians to be a phase of growth, like the measles and other diseases of childhood. I am happy to believe that the school-teacher is exempt from this educational *rash*. It is a complete and fatal fallacy. The notation is the one essential feature of the system. All the other devices may be omitted, but the notation, never. The notation is nature's expression of musical thought. It is the essence of Pestalozzianism. It is the movable Do carried to its logical issue. It is the ultimate of simplicity. It is a living embodiment of the progressive spirit of the age. To sum all up in a word, it is *educational truth*. I therefore claim that the Tonic Sol-fa notation, to revert to the title of my essay, is an essential factor in the education of the people. The proofs to be presented in support of this claim are chiefly statistical and historical and need occupy but a few moments more of your time.

The following facts show why the Tonic Sol-fa notation is necessary to give music to the masses of the people:

1. By the staff notation music is buried beneath its symbols very much as numbers were buried under the Roman system of numerical expression.
2. The Tonic Sol-fa notation releases music from technical bondage and brings it within the comprehension of the human mind exactly as the Arabic figures simplified the study of arithmetic.

3. It is not antagonistic to the staff notation, but prepares the learner for it, just as arithmetic prepares the pupil for algebra. To begin the study of music with the staff is as uneducational as it would be to begin the study of arithmetic through algebraic signs.

4. As the system is natural and philosophical, it is therefore in the highest degree scientific. Experience proves it to be not only a perfect elementary method, but also a key to the higher mysteries of the art. Hence its warmest friends are not only the elementary teachers, but equally the most advanced theoretical and practical musicians. The important truth expressed in this paragraph is embodied in the following items of testimony that is uniformly given by pupils. (a) "I began to study Tonic Sol-fa because it is so simple. I continue to study it because it is so scientific." (b) "The longer I studied the staff the more complicated it seemed, and the harder it was to understand it. The longer I study Tonic Sol-fa the simpler it becomes, and the easier it is to continue the study with a full understanding of every point."

5. Opponents of the Tonic Sol-fa system are invariably those who have not used it sufficiently to understand it. They sometimes *claim* to have tried it, but close inquiry never fails to show their knowledge of the method to be superficial and not practical. This single fact (that all who have tested the Tonic Sol-fa notation properly are in favor of it) establishes the value of the system beyond a peradventure.

ANNEX
B



